Level 3 Diploma in Equine Veterinary Nursing

(7457-43)

February 2022 Version 2.1

Qualification Handbook

Qualification at a glance

Subject area	Veterinary Nursing
City & Guilds number	7457-43
Age group approved	16-18, 18+, 19+
Entry requirements	5 GCSEs at Grade C/Grade 4 or above (must include Mathematics, English and a Science plus two other subjects) or equivalent qualifications at level 2 or higher.
Assessment types	RCVS Day One Skills for Veterinary Nursing, Two written paper synoptic tests, written paper Anatomy and Physiology (Paper 3) knowledge test, OSCE practical exam, City & Guilds devised assignment
Fast track	Available to Centres who are currently approved for 7457-03 Level 3 Diploma in Veterinary Nursing (Small Animal). Fast-track form is available from the 7457 qualification page on the City & Guilds website. Fast-track application forms must be submitted to highpriorityqualifications@cityandguilds.com
Support materials	Centre exam guide
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	GLH	TQT	City & Guilds qualification number	Ofqual accreditation number
Level 3 Diploma in Equine Veterinary Nursing	665	3445	7457-43	603/5102/0

Version and date	Change detail	Section
1.1 August 2019	First version	
1.3 October 2019	Font formatting and page numbers updated	Throughout
	City & Guilds address updated	
1.4 November 2019	Requirements for clinical coaches updated	2. Centre Requirements
	IQA requirements updated	
1.5 February 2020	Purpose statement updated	1. Introduction
	Paper-based exams added for Knowledge tests	4. Assessment
1.6 February 2020	Knowledge test times updated to 120 minutes	4. Assessment
1.7 March 2020	Knowledge test availability updated	4. Assessment
1.8 March 2020	Reference to locums and by-laws removed	Throughout
2.1 February 2022	Updated time constraints section and removed reference to e-volve units	Throughout

Contents

1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
OVERVIEW	
What does the qualification cover?	This Level 3 Diploma in Equine Veterinary Nursing recognises a range of practical skills and knowledge which will equip you to either seek employment or progress into further training within the Veterinary Nursing Industry specifically with equine animals. The units include: • Understand the operational requirements of a veterinary practice • Applied anatomy and physiology for equine veterinary nursing practice • Professional relationships and communication for veterinary nursing practice • Applied equine welfare, health and husbandry for veterinary nurses • Infection control in veterinary practice • Veterinary nursing support of equine patients • Supporting the supply of veterinary medicines • Veterinary nursing support of diagnostic imaging • Veterinary nursing support of laboratory diagnostics • Veterinary operating theatre practice • Peri-operative veterinary nursing support of equine patients • Principles of supporting veterinary anaesthesia • Preparing for professional registration • Equine veterinary nursing emergency and critical care • Principles of equine reproduction and neonatal care The assessment of the includes practical assessment, knowledge assessments and externally set assignments
WHAT COULD THIS QUALIFICATION LEAD TO?	
Why choose this qualification over similar qualifications?	It is for learners who work or want to work as Veterinary Nurses in the Veterinary Nursing sector. It is designed to

	support the preparation of Veterinary Nurses for professional registration on the Royal College of Veterinary Surgeons Register of Veterinary Nurses. It is mandatory for those seeking entry to the RCVS Register to be in possession of an 'approved qualification'. The Level 3 Diploma in Equine Veterinary Nursing falls into this category.
How this qualification supports the identified outcome(s)?	This qualification allows you to progress directly into employment within the Veterinary Nursing Sector. You could also progress onto other higher-level qualifications within the sector.
WHO SUPPORTS THIS QUALIFICATION?	
Employer/Higher Education Institutions	This qualification has been developed with support from the RCVS.
Further information	Further information on the qualification content and assessment is available on the 7457-33 webpage on the City & Guilds website www.cityandguilds.com

Qualification Structure

To achieve the 7457-43 **Level 3 Diploma in Equine Veterinary Nursing** learners must achieve **all** the mandatory units listed below:

City & Guilds unit number	Unit title	GLH
360	Understand the operational requirements of a veterinary practice	40
379	Applied anatomy and physiology for equine veterinary nursing practice	60
362	Professional relationships and communication for veterinary nursing practice	40
380	Applied equine welfare, health and husbandry for veterinary nurses	35
364	Infection control in veterinary practice	20
381	Veterinary nursing support of equine patients	80
366	Supporting the supply of veterinary medicines	20
367	Veterinary nursing support of diagnostic imaging	20
382	Veterinary nursing support of laboratory diagnostics	40
369	Veterinary operating theatre practice	40
383	Peri-operative veterinary nursing support of equine patients	40
384	Principles of supporting veterinary anaesthesia	40
372	Preparing for professional registration	35
385	Equine veterinary nursing emergency and critical care	40
386	Principles of equine reproduction and neonatal care	40

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately), hours spent in preparation, study and assessment and hours in practice (1800 hours).

Title and level	GLH	TQT
City & Guilds Level 3 Diploma in Equine Veterinary Nursing	665	3445

2 Centre requirements

Approval

If your Centre is approved to offer the qualification Level 3 Diploma in Veterinary Nursing (Equine) 7457-13, you can apply for the new Level 3 Diploma for Equine Veterinary Nursing (7457-43) approval using the **fast track approval form**, available from the 7457 qualification page on the City & Guilds website.

New Centres will need to gain Centre approval. Existing Centres who wish to offer this qualification must go through City & Guilds' **full** Qualification Approval Process. Please refer to the City & Guilds website for further information on the approval process: **www.cityandguilds.com**.

To offer these qualifications, new Centres will need to gain both Centre and qualification approval. Please refer to the *Centre Manual* for further information.

Any centre which locates to an alternative address from that originally approved by City & Guilds must notify us of this change as outlined within the Centre Manual. To ensure compliance with RCVS regulatory requirements, City & Guilds must carry out a further External Quality Assurance activity at the new site **before** delivery and assessment of the qualification can continue.

Please note that External Quality Assurance activity for this qualification is managed by the following City & Guilds Specialist Quality team:

High Priority Qualification

T: 0300 303 53 52

E: highpriorityqualifications@cityandguilds.com

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualifications before designing a course programme.

RCVS Centre approval standards

To meet the RCVS approval criteria, City & Guilds monitors Centres against the RCVS regulatory requirements to ensure that any Centre delivering the qualification has also met the required sector regulatory standards.

The RCVS requirements are in addition to what is specified in this qualification handbook, generic Centre Manual and Quality Assurance Requirements.

The standards that need to be met are as follows:

Centre Standard 1 – The organisation

There is a binding agreement with City & Guilds that sets out national and professional obligations

A designated senior member of centre staff is responsible for the overall delivery of the qualification.

Centre Standard 2 – Financial integrity and market

- Centres must be able to demonstrate a sound and sustainable operating basis
- Proposed qualification delivery must demonstrate an adequate and sustainable market

Centre Standard 3 – Human resources

- Centres must have sufficiently suitably qualified staff to deliver the qualification and to provide appropriate levels of student support
- Active support of continuous staff development must be demonstrated

Centre Standard 4 – Centre management and communication

- Centres must be able to demonstrate clear and effective lines of communication between members of centre staff and affiliated veterinary training practices
- Training practices must be regarded as an integral resource of the centre and must be developed and supported accordingly
- A Memorandum of Understanding (MoU) must be in place clearly setting out the roles and responsibilities in place for all training practices, and other organisations, partnering the centre to deliver
- Record-keeping must be effective and compliant with the current requirements of the regulatory authorities
- Centres must allow City & Guild access to people, premises and records and must co-operate with RCVS quality assurance activities in relation to qualification delivery

Centre Standard 5 – Management and support of students

- An admissions policy, taking into account entry criteria for veterinary nurse training and equal opportunities, must be demonstrated
- Records of student attendance and progress must be maintained
- Adequate opportunity must be afforded for the provision of individual tutorial and/or pastoral student support
- Arrangements must be in place for the identification and support of students with a disability or educational need
- Adequate and effective support of students in employment (or on an educational placement) must be demonstrated
- Arrangements must be in place for RCVS enrolment of students
- Where students are not enrolled with RCVS prior to starting their placement the centre must provide, by letter, details of the impact this will have on training time requirements and the potential effects to initial registration

Centre Standard 6 – Programme design

- Programme design must address the qualification learning outcomes and Topics
- The curriculum should take into account the close links to:

- Centre Standard 7 – Practical placement arrangements
- Centre Standard 8 – Accommodation and practical teaching resources
- Centre Standard 9 – Learning resources
- Centre Standard 10 – Assessment and quality assurance
- Centre Standard 11 – Programme review

Approved Centres must be able to provide evidence to both City & Guilds and RCVS that the two sets of Standards are being met.

The RCVS Regulatory Organisation Centre Handbook provides further details of the specific requirements within each Standard along with supporting guidance. The handbook can be found at: https://www.rcvs.org.uk/

Resource requirements

Physical resources and site agreements

This qualification requires learners to have access to suitable work experience in clinical veterinary practice. This may be on the basis of paid employment (e.g. apprenticeship) or an unpaid placement.

Practical, work-based learning comprises a critical element of this qualification. Veterinary practices that support the learners will accordingly be evaluated and ongoing quality assurance by Centres to ensure that they have in place the required standard of facilities, case-load and staff expertise to support clinical learning.

Work placement

A learner's rights associated with work experience depend upon their employment status and whether they are classified as a worker, a volunteer or an employee. Centres are required to investigate the requirements and satisfy themselves that employers are meeting their responsibilities for any employment rights and pay to which the learner is eligible.

Learners must be provided with adequate access to placements (or employment) in a veterinary practice for the purpose of clinical training and assessment. Practices used for the placement of learners must meet the RCVS standards for Training Practices (see **Training Practices**).

Where learners are not employed, the Centre must provide a placement for all learners that they recruit onto the programme. It is not acceptable to expect learners to find placements for themselves unless they wish to gain experience in a practice other than one available within the Centre's "pool" of available placements e.g. they wish to gain practical experience whilst living at home, some distance from the Centre.

Consideration needs to be given by the Centre to the number of learners requiring a placement at any one time.

Centres should have sufficient affiliated Training Practices in order to offer clinical placements to all of their learners. It is not acceptable to rely upon obtaining placement agreements from practices affiliated to other Centres, or to require learners to find their own placements.

Where Centres have insufficient provision of placements, City & Guilds cannot approve them to run the qualification and learners will not be able to enrol.

If a new Centre seeks approval to run the qualification, City & Guilds will notify the RCVS who will then contact the Centre to ascertain the arrangements in place for access to Training Practices.

Training Practices

Centres must see Training Practices as an integral resource and must be developed and supported accordingly.

An MoU must be in place with all Training Practices, including any that may be organisationally linked to the Centre (such as university veterinary hospitals).

Site visits for quality assurance purposes should be made to a Centre's linked Training Practices at least once a year. Training Practices should be risk-assessed by the Centre and those presenting high risk should be monitored more frequently, either indirectly or involving site visits depending upon the issues.

Situations that place a Training Practice at high risk include;

- unqualified or inexperienced clinical coaches;
- high learner attrition and/or slow progress;
- repeated learner failure of objective structured clinical examination (OSCE);
- deficiency of clinical resources

Please note: this list is not exhaustive.

There must be a clear action plan in place to demonstrate how the risks will be reduced.

Centres are expected to communicate regularly with Training Practices, and in particular clinical coaches, to ensure that they are kept abreast of training issues. Communication should include at least one Training Practice liaison meeting annually.

Further guidance can be found in the following sections of the RCVS Regulatory Organisation Training Practice Handbook **https://www.rcvs.org.uk/**

Training Practice (TP) approval standards
TP Standard 1 – The organisation
TP Standard 2 – Human resources
TP Standard 3 – Clinical facilities
TP Standard 4 – Clinical training resources
TP Standard 5 – Delivery of training
TP Standard 6 – Management, monitoring and review of training
TP Standard 7 – Declaration.

Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the areas for which they are delivering training and/or have experience of providing training.
- either be Registered Veterinary Nurses (RVN) or Registered Veterinary Surgeons (MRCVS) in addition to holding appropriate education qualifications
- demonstrate veterinary nursing experience and continuous professional development (CPD) at a significantly higher level than that of the programmed being delivered
- have credible experience of providing training.

Clinical coaches

- must be either experienced, confident and competent Registered Veterinary Nurses (RVN) or registered Veterinary Surgeons (MRCVS)
- Centres must ensure that clinical coaches receive suitable training and continuing support for their role

Centre staff may undertake more than one role, e.g. tutor and assessor or Internal Quality Assurer (IQA), but cannot internally verify their own assessments.

Assessors and Internal Quality Assurer

Assessors/Internal Quality Assurers (IQA) must be occupationally competent and qualified to at least level 3 or above. Assessor / IQA qualifications are not a requirement for this qualification, however assessors / IQAs must demonstrate they are assessing/ quality assuring to the level of current assessor and IQA qualifications.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments. Centres should ensure that CPD planning should meet the requirements of course delivery and of individuals involved in teaching

Learner entry requirements

Before undertaking this qualification, learners must hold five GCSEs or Standard grade passes at grade C/4 or above in:

- English language
- Mathematics
- A science subject
- Two further subjects

Or equivalent qualifications at level 2 or higher.

Learners must have access to suitable work experience in an Approved Training Practice (TP) or Auxiliary Training Practice (aTP) clinical veterinary practice. This may be on the basis of paid employment (e.g. apprenticeship) or an unpaid placement.

Age restrictions

City & Guilds cannot accept any registrations for learners under 16 as these qualifications is not approved for learners under 16s.

Record keeping

Centres must have sight of (and keep copies of) original examination certificates when checking learner eligibility for recruitment to the programme.

Centres must have in place systems for recording learner attendance, educational needs, progress and tutorial interviews/meetings.

All current learner progress records, or proposed learner progress record systems, should be available, by cohort, for inspection in the event of a quality monitoring audit.

Guided Learning Hours (GLH)

An indication of the GLH proposed for each unit of the qualification has been provided and adds up to 665 hours in total.

GLH are defined as all times when a member of Centre staff is present to give specific guidance towards the qualification being studied. GLH include lectures, tutorials and supervised study, whether in the classroom or via open learning. GLH may also include time spent by Centre staff directly assessing a learner's competence. GLH do not include private study, homework or work-based learning. Neither do they include time spent by staff in the day-to-day marking of assignments and homework where the learner is not present nor does it include hours where supervision is of a general nature and is not specific to the study of veterinary nursing.

External Quality Assurance

City & Guilds recognises the Level 3 Diploma in Veterinary Nursing (7457) as a qualification of significant risk and therefore all quality assurance activity is managed by the City & Guilds High Priority Qualifications team.

This team manages all aspects of quality assurance including centre and qualification approval, quality assurance activity planning and processing as well as managing centre data (such as TPs, Clinical Coaches, Assessment Sites).

The team will plan annual monitoring activities with your allocated External Quality Assurer (EQA) which will normally be carried out over a period of three days as specified below:

Day 1 External Quality Assurance Activity
Day 2 TP visits (minimum of two per 12 month period)
Day 3 Remote sample of the RCVS DAY ONE SKILLS FOR VETERINARY NURSING

Please note that the order of these activities will be specified by the EQA prior to the activity taking place

Centres must ensure EQAs are given reasonable access to carry out their role and to ensure that their quality assurance activities cover the criteria above. Where a centre does not comply with these requirements City & Guilds reserves its right to temporarily suspend qualification approval until the requirement is met.

Training Practices, Clinical Coaches and Assessment Sites

Approved centres are required to ensure City & Guilds are updated on any changes to TPs, aTPs, Clinical Coaches and Assessment Sites. The High Priority Qualifications team will request this information on an annual basis at the start of the academic year to ensure our records remain accurate.

Information Sharing

Where necessary we may share information relating to your centre with the RCVS. This may include information on qualification approval, the outcome of external quality assurance activities or other relevant data.

For more information please see our 'privacy policy' available on the City & Guilds website on how we use your data.

RCVS guidance

Student Veterinary Nurses (SVNs) must have completed and must provide evidence that they have completed at least 2990 hours in training as part of an accredited further or higher education qualification. This includes both practical experience whilst employed, or on placement from their Centre, in an approved Training Practice and time attending the Centre

The training programme must include a minimum of 1800 hours employed, or on placement, in an approved training practice in addition to the taught programme. The period of practical training evidence must be based on normal contracted or agreed working hours and must exclude annual leave, and other absences including sick leave and bank holidays, breaks overtime and on call time.

Additional guidance developed by the RCVS can be found at:
https://www.rcvs.org.uk/education/approving-veterinary-nursing-qualifications/

This guidance covers:
RCVS regulatory requirements
Veterinary nursing licence to practise qualifications
Standards of approval – to include clinical supervisor role and responsibilities
The role of training practices
RCVS quality monitoring processes
RCVS student enrolment and registration
Schedule 3 and delegation

3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs, support and guidance they may need when working towards their qualifications
- support and guidance they may need when working towards their qualifications
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification[s], their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Candidates must have access to a taught programme in support of the qualification outcomes. This may be provided by an attended programme or through a programme of blended learning, delivered by an approved Centre.

Support materials

The following resources are available for these qualifications:

Description	How to access
Centre Exam Guidance	**www.cityandguilds.com**
Assessment pack	**www.cityandguilds.com**

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: **www.cityandguilds.com/eportfolios**.

4 Assessment

Summary of assessment methods

Candidates must complete all of the assessments for the qualification. These includes:

- RCVS Day One Skills for Veterinary Nurses
- Externally set assignment
- City & Guilds devised tests, using written papers
- Practical exam (OSCE)

Available assessments/assignments

City & Guilds has written the following assessments to use with this qualification:

- Synoptic theory test (Paper 1)
- Synoptic theory test (Paper 2)
- Anatomy and Physiology theory test (Paper 3)
- Externally set assignment
- Practical exam (OSCE)

Assessment Types			
Unit	**Title**	**Assessment method**	**Where to obtain assessment materials**
372 Links to unit 372	Preparing for professional registration	Externally set Assignment	Website
405 Links to units 360, 362, 380, 364, 366, 386	Synoptic knowledge test Paper 1	Knowledge Test (dated)	Written exam paper
406 Links to units 381, 367, 372, 382, 369, 383, 384, 385	Synoptic knowledge test Paper 2	Knowledge Test (dated)	Written exam paper
407 Links to unit 379	Anatomy and Physiology (Paper 3)	Knowledge Test (dated)	Written exam paper
408 Links to units 360, 362, 380, 364, 381, 366, 367, 382, 369, 383, 384, 385	OSCE	Practical exam (dated)	Website for booking details

Time constraints

The following must be applied to the assessment of this qualification:

- This will be a period of reflection where the learner should improve their knowledge and skills sufficiently enough for the Centre, and the learner, to feel comfortable re-registering them on to the qualification.

Assessment strategy

RCVS Day One Skills for Veterinary Nursing

Practical elements of this qualification are assessed by the completion of the RCVS Day One Skills for Veterinary Nursing. Learners may complete a portfolio of evidence which must be agreed and signed off by the EQA.

Objective Structured Clinical Examination (OSCE)

The OSCE consists of 12 stations; each one is six minutes long. Learners are required to pass a minimum of eight stations. Within each station are a number of critical steps. Learners must achieve these critical steps in order to pass the station. It is the Centres responsibility to ensure learners are adequately prepared for the examination and familiar with the critical steps.

All City & Guilds OSCE stations are available on the City & Guilds Veterinary Nursing webpage.

Externally set assignments

Assignments are set by City & Guilds and marked by the Centre according to criteria set by City & Guilds. Quality assurance must be provided by the Centre, and must be independently moderated. The following unit will be assessed through an externally set, internally marked assignment

- Unit 372 Preparing for professional registration

Written papers - Synoptic tests and Anatomy and Physiology test

These will take place in March, June, September and December. These are available online, via City and Guilds as a paper exam.

Learners may have to answer some questions involving calculations. Therefore non-programmable calculators and/or blank paper and pens are permitted for learners.

Full test specifications for each of the synoptic and Anatomy and Physiology tests are found below.

Setting the pass mark for the knowledge tests

The knowledge tests (Paper 1, Paper 2 and Paper 3) are externally set, externally marked examinations and are graded pass/fail only.

The pass mark for each assessment will be set for each paper through a process of professional judgement by technical experts called 'awarding'. Through the awarding process, the pass mark is determined using both quantitative and qualitative evidence (eg analysis of candidate's scripts, archived samples of candidate work and statistical evidence). The pass mark may differ for each paper from series to series to take into account differences in the difficulty of the question papers.

Test Specifications

Synoptic tests

Paper 1: Units 360, 362, 380, 364, 366, 386 (synoptic)
Duration: 120 minutes

Unit	Outcome	Number of marks	%
360	1. Understand the role of the veterinary team	5	8%
	2. Understand the aims of health and safety within a veterinary practice		
	3. Understand how to manage stock and waste in veterinary practice		
	4. Know the principles of record keeping		
362	1. Understand the dynamics of communication	4	7%
	2. Be able to communicate with clients and colleagues		
	3. Understand factors affecting working relationships with clients and the veterinary team		
	4. Understand the principles of customer service		
380	1. Understand the principles of equine legislation and identification	15	25%
	2. Understand the essential factors for maintaining equine health		
	3. Understand equine parasites and methods for their control		
	4. Be able to handle and transport equine patients safely		
	6. Understand the use of different types of accommodation for equine patients		
364	1. Understand the role of infection in animal and human health	9	20%
	2. Understand the principles of disease transmission in veterinary practice		
	3. Understand the principles of disinfection and sterilisation		
	4. Understand how to maintain personal hygiene in relation to cross-infection		
	5. Understand the principles of infection monitoring		

	6. Understand the principles of isolation nursing	3	
366	1. Understand the legal requirements in relation to the storage and supply of veterinary medicines	10	17%
	2. Know how to supply veterinary medicines to clients		
	3. Know how to provide advice to clients on the administration of veterinary medicines.		
	4. Understand the use of veterinary medicines		
386	1. Understand the reproduction and breeding of equids	14	23%
	2. Understand normal foal physiology and development		
	3. Understand foal nutrition and feeding		
	4. Understand the routine veterinary care of normal foals		
	5. Understand the nursing requirements of orphan foals		
	6. Understand the nursing requirements of sick foals		
	Total	**60**	**100**

Paper 2: Units 381, 367, 382, 369, 372, 383, 384, 385 (synoptic)

Duration: 120 minutes

Unit	Outcome	Number of marks	%
381	1. Understand how pathology affects the normal function of an equine patient	13	21%
	2. Be able to plan and deliver care for equine patients		
	4. Understand the principles of wound healing and care		
	5. Understand how to facilitate effective home and follow-up care		
	6. Understand how to support a client through grief and loss		
367	1. Know the legal requirements for conducting radiography	8	13%
	2. Understand the principles of radiography as a diagnostic imaging technique		
	3. Know the principles of ultrasonography, magnetic resonance imaging (MRI), endoscopy as diagnostic imaging techniques		
382	1. Understand how to collect and prepare specimens for examination	3	7%
	2. Know how to test pathological specimens		
	3. Know how to prepare specimens for transportation		
369	1. Understand the principles of operating theatre design and use	5	8%
	3. Understand the use of operating theatre furniture and equipment		
	4. Understand the principles of instrument care and sterilisation		
	6. Understand the management of specialist equipment and materials during a surgical procedure		

Unit	Outcome	Number of marks	%
372	1. Know the legal framework for veterinary nursing practice	5	8%
	2. Understand the accountability of veterinary nurses		
383	3. Know how to prepare an equine patient for surgery	8	13%
	4. Understand the requirements for immediate post-operative care of equine patients		
	5. Understand post-operative nursing requirements for specific surgical procedures		
384	1. Understand the principles of anaesthesia	9	15%
	2. Know the function of anaesthetic drugs		
	3. Understand the function of anaesthetic equipment		
	4. Understand anaesthetic preparation and induction		
	5. Understand the principles of monitoring an anaesthetised animal		
	6. Know how to recognise and respond to anaesthetic emergencies		
385	1. Understand the principles of equine first aid	9	15%
	2. Know how to support emergency veterinary care		
	3. Understand the principles of intravenous catheterisation and intravenous fluid therapy		
	4. Understand special intensive nursing care technique		
	5. Know nursing requirements for equine patients requiring intensive care		
	Total	**60**	**100**

Anatomy and Physiology (Paper 3): Unit 379

Duration: 120 minutes

Unit	Outcome	Number of marks	%
379	1. Know equine anatomical and physiological terminology in relation to veterinary nursing practice	20	33%
	2. Know anatomical landmarks in living animals that are relevant to veterinary nursing practice		
	3. Understand the normal form and function of body systems in equids	40	67%
	Total	**60**	**100**

Recognition of prior learning (RPL)

Recognition of prior learning means using a person's previous experience or qualifications, which have already been achieved to contribute to a new qualification.

Learners may be credited with any unit of the qualification previously certificated provided that this has been achieved within five years of registration for the remaining units. Where a certificated unit was achieved more than five years prior to registration, learners must provide evidence of currency. A unit achieved more than ten years prior to registration will not be accepted for RPL.

5 Units

Availability of units

Units are also on The Register of Regulated Qualifications: **http://register.ofqual.gov.uk/Unit**

Structure of the units

These units each have the following:

- City & Guilds reference number
- Title
- Level
- Guided learning hours (GLH)
- Unit aim
- Information on assessment
- Learning outcomes, which are comprised of a number of Topics

Unit 360 Understand the operational requirements of a veterinary practice

Level:	Level 3
GLH:	40
Unit aim	This unit facilitates an understanding of working practise and the essential operation of a veterinary practice so that an employee may work effectively and safely within such an environment. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse

Learning outcome

The learner will:

1 Understand the roles of members of the veterinary team

Topics

The learner can:

1.1 Compare and contrast the roles of a veterinary surgeon, registered veterinary nurse and student veterinary nurse

1.2 Explain the role and functions of lay staff within a veterinary practice

1.3 Outline the significance of the veterinary surgeons act 1966.

Range

(1.1) **Roles: veterinary surgeon**

Define acts of veterinary surgery

Protection of animals' interests

The Veterinary Surgeons Act

Purpose of the RCVS Code of Professional Conduct for Veterinary Surgeons

Roles: registered veterinary nurse

Registration of Veterinary Nurses, brief overview of accountability and regulation

Supportive care to include the use of nursing care plans

Working within professional competence

Purpose of the RCVS Code of Professional Conduct for Veterinary Nurses to include: the principles of practice

Public image and professionalism

Roles: student veterinary nurse

Limitations of the role in relation to registered veterinary nurses

Appropriate delegation

(1.2) **Role and functions of lay staff**

Role of lay members of veterinary practice staff and limitations

Appropriate delegation

(1.3) **Veterinary Surgeons Act 1966**

In relation to who may treat animals (provisions for owners, veterinary nurses, student veterinary nurses, para professionals) (Veterinary Surgeons (Exemptions) Order 2015)

Delegation of acts of veterinary surgery by a veterinary surgeon

Accepting delegated work – veterinary nurses and student veterinary nurse, acknowledging limitations

Learning outcome

The learner will:

2 Understand the aims of effective health and safety within a veterinary practice

Topics

The learner can:

2.1 Describe the key applicable health and safety legislation in veterinary practice

2.2 Explain the aims of health and safety in veterinary practice

2.3 Explain the principal risks in a veterinary practice

2.4 Demonstrate how to move and handle equipment safely, identifying risk factors and ergonomic principles.

Range

(2.1) **Key applicable health and safety legislation to include:**

The Health and Safety at Work Act

Control of Substances Hazardous to Health (COSHH)

Ionising Radiation Regulations (IRR)

Manual Handling Operations Regulations

Reporting of injuries, Disease and Dangerous Occurrences Regulations (RIDDOR)

The Role of the Health and Safety Executive (HSE)

(2.2) **Aims of health and safety in veterinary practice**

Reduction of risks to include: evaluating risks, risk assessments, standard operating procedures and guidelines

Identification of animals, clients and staff at special risk (e.g. asthma, pregnancy, age, spinal injuries)

Consequences of poor health and safety (human, legal and economic costs)

Individual and employer accountability.

(2.3) **Principal risks**

Differentiate between a risk and a hazard

Risks associated with:

The environment (practice design, furnishings and equipment), security, working hours and shift patterns, chemical and biological hazards

Hazards to include:

Trips/ slip, electrical, substances, biohazards, gases, radiation, patients

Infection – inter-animal, zoonoses

Radiation to include:

Basic radiation safety – shielding, hazard lights, distance, protective equipment, signs and verbal warnings

Exposure monitoring and use of dosimeters

Provisions of Ionising Radiation Regulations.

(2.4) **Move and handle equipment safely**

Basic ergonomics – limitations of humans as load carriers

Identification of risks – positioning of loads, weight, stability, and handler factors (e.g. size, experience, and physical condition)

Avoiding risk – unnecessary moves, appropriate storage, use of aids (e.g. slides, trolleys and mechanical lifting equipment as applicable)

Safe techniques for manually moving loads

Provisions of Manual Handling Operations Regulations.

Learning outcome

The learner will:

3 Understand how to manage stock and waste in veterinary practice

Topics

The learner can:

3.1 Identify the range of materials needed to support a veterinary practice

3.2 Summarise the principles of stock control

3.3 Explain the principles of handling and disposal of hazardous and non-hazardous substances.

Range

(3.1) **Range of materials to include**

Consumables, sterile supplies, pharmaceuticals, food, cleaning products, any other necessary items.

(3.2) **Principles of stock control**

Basic requirements for safe storage of medicines including Registration of Premises

Legal requirements for record keeping of pharmacy stock to include batch tracking

Maintenance of effective records – sale, supply, use

Methods of placing an order in a veterinary practice

Requirements for handling and storing materials following delivery to maintain condition and safety (vaccines, sterile supplies, controlled drugs, food) to include: stock rotation and expiry dates

Damaged stock and discrepancies between order and stock delivery

Keeping stock in consulting rooms, prep areas, patient accommodation, operating theatre to include: labelling of broached vials and environmental considerations.

(3.3) **Handling and disposal of hazardous and non-hazardous** substances (note in Scotland this is special and non-special waste)

Principles of Safe Handling of Waste including use of PPE

Disposal systems for healthcare waste;

Hazardous waste (infectious, cytotoxic/cytostatic, contaminated sharps)

Non-hazardous waste (offensive, sharps, pharmaceuticals, domestic)

Storage and disposal of animal tissue and cadavers

Relevant legislation

Environment Protection Act

Hazardous Waste Regulations (HWR)

Control of Substances Hazardous to Health Regulations (COSHH)

Record keeping.

Learning outcome

The learner will:

4 Know the principles of record-keeping

Topics

The learner can:

4.1 Explain the principles of veterinary record-keeping

Range

(4.1) **Principles of veterinary record-keeping**

Confidentiality

Provisions of the Data Protection Act including General Data Protection Regulations (GDPR)

Principles of data protection to include record keeping, time frame for retention of records and disposal methods

Sharing of information

Receiving records from and supplying records to another veterinary professional

Record keeping duties in the RCVS Code of Professional Conduct for Veterinary Surgeons and Veterinary Nurses

Client details

Patient records

History taking and recording

Recording of observations

Creating and maintaining basic records of financial transactions

Use of abbreviations (risks, abbreviations in common use)

Principles of certification e.g.travel documentation

Unit 360 Understand the operational requirements of a veterinary practice

Supporting Information

Evidence requirements

Evidence requirements
You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Guidance for tutors

LO3 Topic 3.3 Principles of handling and disposal of hazardous and non-hazardous substances
Tutors could refer to the British Veterinary Association good practice guide to handling veterinary waste

LO4 Topic 4.1 Principles of veterinary record-keeping
Tutors could refer to the RCVS guidance on GDPR

Reference to other units

LO1 Topic 1.1
Accountability and regulation (cross ref unit 372)
Nursing care plans (cross ref unit 383)
RCVS Code of Professional Conduct for Veterinary Nurses - to include the principles of practice (cross ref unit 372)

LO2 Topic 2.3
Infection inter-animals, zoonoses (cross ref unit 364)
Radiation (cross ref unit 367)

LO3 Topic 3.2
Principles of stock control (cross ref unit 366)

LO4 Topic 4.1
Principles of certification e.g.travel documentation (cross ref unit 380)

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topic: 2.4

Unit 379 Applied anatomy and physiology for equine veterinary nursing practice

Unit level:	Level 3
GLH	60
Unit aim:	This unit provides the student veterinary nurse with an appropriate theoretical knowledge of the normal structure and function of the major body systems of equine patients. The emphasis of this unit is applied anatomy and physiology. The student should also develop the practical skills to identify visually, or by palpation, the key anatomical features and landmarks required in daily nursing practice.

Learning outcome

The learner will:

1 Know anatomical and physiological terminology in relation to veterinary nursing practice

Topics

The learner can:

1.1 Explain the directional terms, prefixes and suffixes, commonly used in veterinary practice

1.2 Identify the modes of joint movement.

Range

(1.1) **Directional terms**

Anatomical planes, directions and associated terms to include: cranial (anterior), caudal (posterior), lateral, medial, ipsilateral, contralateral, dorsal, ventral, palmar, plantar, rostral, proximal, distal, superficial, deep

Median/mid-sagittal plane, sagittal/paramedian plane, dorsal plane, transverse plane

Prefixes and suffixes

Common prefixes and suffixes

Prefixes to include: a/an, ante, anti, dys, ecto, endo, extra, hemi, haem, hyper, hypo, poly, pyo, infra, inter, intra, neo, peri, poly, post, pre, pseudo, retro, semi, sub, super, supra, trans, ultra

Suffixes to include: algia, centesis, cyte, ectomy, emesis, itis, logy, penia, pexy, phobia, plasia, phagia, stomy, tomy, rrhoea, oma

(1.2) **Modes of joint movement**

Flexion, extension, adduction, abduction, gliding, rotation, circumduction, protraction, retraction, supination, pronation.

Learning outcome

The learner will:

2 Know anatomical landmarks in living animals that are relevant to veterinary nursing practice

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Topics

The learner can:

2.1 Identify the position of anatomical landmarks in intact equids

2.2 Identify the anatomical boundaries of the body cavities

Range

(2.1) **Anatomical landmarks**

Axial skeleton to include:

Skull, cranium, maxilla, mandible, foramen magnum, tympanic bulla, occipital crest, angle of jaw, zygomatic arch, mandibular ramus, spinous and transverse process of vertebrae, first rib, last rib, manubrium, xiphisternum, xiphoid cartilage, sternebrae, costal arch,

Appendicular skeleton to include:

Forelimb landmarks;

Spine of scapula, spinal tuberosity, scapular cartilage, , greater tubercle of humerus, humeral condyles, olecranon, radius, ulna, carpus, metacarpus, accessory carpal, proximal, middle and distal phalanx, sesamoid bones

Hindlimb and pelvis landmarks to include:

Ilium, ischium, pubis, tuber ischii, tuber sacrale, tuber coxae, brim of pubis, acetabulum, greater trochanter, patella, tibial tuberosity, calcaneus, femur, tibia, fibula, tarsus, metatarsus, proximal, middle and distal phalanx, sesamoid bones

Veins to include:

Jugular, lateral thoracic, femoral, cephalic, saphenous, coccygeal, lingual

Arteries to include:

Carotid, coccygeal, femoral, lingual, metatarsal, palmar digital

(2.2) **Anatomical boundaries of the body cavities** to include:
Thorax, abdomen, pelvic cavity, mediastinum, coelom

Learning outcome

The learner will:

3 Understand the normal form and function of a range of body systems in equids

Topics

The learner can:

3.1 Explain basic cell structure, physiology and division
3.2 Explain basic homeostatic mechanisms
3.3 Explain the structure and function of the hoof, skin, hair and associated glands
3.4 Explain the structure and function of the musculoskeletal system
3.5 Explain the structure and function of the digestive system
3.6 Explain the structure and function of the nervous system
3.7 Explain the structure and function of the endocrine system
3.8 Explain the structure and function of the circulatory system
3.9 Explain the structure and function of the respiratory system
3.10 Explain the structure and function of the urinary system
3.11 Explain the structure and function of the reproductive system in the stallion and mare.

Range

(3.1) **Cell structure, physiology and division**
Cell structure and organelles to include: Cell membrane, cytoplasm, nucleus, vacuoles, DNA, RNA, nucleolus, mitochondria, centrosomes, golgi apparatus, endoplasmic reticulum, lysosomes, vacuoles, ribosomes

Cell division to include: Meiosis, mitosis

Basic tissue types to include: Epithelial (smooth and compound), simple columnar, cuboidal, squamous, ciliated, glandular, stratified, transitional
Glands: unicellular, exocrine and endocrine, mixed
Connective (dense and loose), haemopoietic, adipose, blood, cartilage and bone
Nervous
Muscle (cardiac, skeletal and smooth)

(3.2) **Homeostatic mechanisms**
Maintenance of fluid balance to include: Intracellular, extracellular,
osmosis

diffusion

Maintenance of pH, acid base balance

Thermoregulation

Feedback loops

(3.3) **Hoof, skin, hair and associated glands**

General structure of hairy skin to include: Epidermis, dermis/corium, hypodermis/subcutaneous layer (to include stratum corneum, lucidum, granulosum, basale/germinativum)

Structure and function of the hoof to include: Coronary dermis and band, periople, coronet, frog, laminae, sole, bars, white line, digital cushion

Hair structure and growth to include: Arrector pili, primary, secondary and tylotrich hairs, modified epidermal structures (to include guard hairs, sinus hairs/vibrissae)

Glands to include: Sweat glands (apocrine and eccrine), sebaceous, circumanal, anal, ceruminous, meibomian, harderian, mammary, sudoriferous

(3.4) **Musculoskeletal system**

Classification of bones to include: Long, short, flat, irregular, pneumatic, sesamoid

Structure of the skeleton to include:

Bones of the axial and appendicular skeleton

Condyle, crest, foramen, fossa, groove, medullary cavity, periosteum, process, sinus, trochanter, tuberosity, tubercle, epiphysis, metaphysis, diaphysis, growth plate

Sinuses e.g. paranasal, frontal, maxillary

Guttural pouches

Muscle terminology to include: Origin, insertion, action, tendon, ligament, aponeurosis, contraction, relaxation, tone, antagonistic pairing

Clinically relevant muscle groups to include: Pectorals, biceps, triceps, latissimus dorsi, longissimus dorsi, trapezius, brachiocephalicus, supraspinatus, infraspinatus, gluteals, quadriceps, biceps femoris, semimembranosus, semitendinosus, gastrocnemius, cranial tibial, abdominal, diaphragm, peroneus tertius, intrinsic, extrinsic, hypaxial and epaxial

Distinction of tendon and ligaments and those which are clinically relevant to include: Nuchal, supraspinous, gastrocnemius tendon, cruciate, collaterals, superficial and deep digital flexor tendons, suspensory ligament, patellar ligaments, extensor tendons, stay/reciprocal apparatus

Joints to include: Fibrous, cartilaginous, synovial, condylar, ellipsoidal/sliding, hinge, pivot, plane, spheroidal/ball and socket

(3.5) **Digestive system**

Location, structure and function of the alimentary tract to include: Oral cavity, salivary glands, pharynx, oesophagus, stomach, small intestine (duodenum, jejunum, ileum) large intestine (caecum, large colon including; diaphragmatic, pelvic and sternal flexures, small colon, rectum) liver and pancreas

Dentition to include:
Anatomy of the generic tooth
Dental formula
Herbivorous adaptation of teeth
Eruption times of deciduous and permanent teeth

Process of digestion and absorption to include:
Process of enzymatic digestion and fermentation
Function of the liver and hepatic portal vein.

(3.6) **Nervous systems**

Structure and function of nervous system in controlling body systems to include:
Central nervous system (brain and spinal cord, cerebrospinal fluid (CSF))
Peripheral nervous system (cranial nerves and spinal nerves)
Autonomic nervous system (sympathetic and parasympathetic)
Somatic nervous system
Sensory nervous system
Motor nervous system
Structure and function of neurons
Nerve impulse transmission and basic reflex arc to include: Synapse and neurotransmitters
Location of clinically relevant peripheral nerves to include: Radial, median, ulnar, sciatic and femoral

Structure and physiology of special sense organs:
Ear to include: External, middle and inner, pinna, external auditory meatus, tympanic membrane, cartilages, auditory ossicles, oval and round windows, labyrinth, auditory/Eustachian tube

Eye to include: Eyelids, conjunctiva, sclera, cornea, uvea and associated structures, chambers, humour, nictitating membrane, equine corpora nigra, fields of vision

Modalities of taste, olfaction (vomeronasal response, flehmen response) and touch (sensory receptors)

(3.7) **Endocrine system** to include: Hypothalamus, pituitary gland, pineal gland, thyroid gland, parathyroid gland, pancreas, adrenal gland, kidney and reproductive glands

Control mechanisms to include: Positive and negative feedback

(3.8) **Circulatory system to include:**

Heart

Blood vessels

Blood and plasma

The path of blood through the circulatory system and the location of major vessels to include: Heart, hepatic portal systems, aorta, pulmonary, carotid, brachial, femoral and coccygeal arteries, palmar/plantar digital, cephalic, jugular, saphenous and coccygeal and lateral thoracic veins

Pulmonary and systemic circulation

Sites of haematopoiesis to include: Specific sites of production in young and adult equids

Identification of blood cell types under the light microscope to include: Erythrocytes, thrombocytes and leucocytes (granulocytes and agranulocytes)

Recognition of the cardiac cycle e.g. electrocardiograph, sinoatrial and atrioventricular nodes, Purkinje system, origin of heart sounds

Factors controlling blood pressure and circulatory volume (baroreceptors)

Functional terms related to the pulse to include: Rate, rhythm, character, volume, deficit

Structure and function of the lymphatic system to include: Structure of lymph node, composition and colour of lymph, lymphatic circulation

Right and left lymphatic duct, cisterna chyli, thymus, spleen, lacteals, thoracic duct

Location and palpation of common superficial lymph nodes

The immune system

Humoral and cell mediated

Response to infection

Response to vaccination

(3.9) **Respiratory system** to include: Nares, nasal cavity, pharynx, larynx, trachea, bronchi, bronchioles, alveoli, lobes of lungs and pleura

Terms associated with respiration, to include: Rate, rhythm and pattern (Cheyne stokes, agonal) tidal and minute volume, inspiratory and expiratory reserve, dead space, vital and total lung capacities, external respiration, residual volume, functional residual volume

Respiratory cycle to include: Mechanisms of gaseous exchange

Neural control of respiration, Hering-Breuer reflex

Obligate nasal breathing.

(3.10) **Urinary system** to include: Kidneys, nephron, ureters, bladder including cellular structure (micturition, trigone), urethra

Kidney functions to include: Production of glomerular filtrate and urine

control of blood pressure and homeostasis (baroreceptors and osmoreceptors)

Renal endocrine functions: Anti diuretic hormone (ADH), aldosterone, renin, angiotensinogen, angiotensin, erythropoietin, fluid balance

(3.11) **Reproductive system**

Stallion

Location, structure and function of the male gonad and tubular system to include:

Testicles (Leydig cells, Sertoli cells, spermatogenic cells, epididymis, deferent duct, spermatic cord), penis, accessory male sex organs

Hormones controlling and produced by the male gonad to include: Testosterone, oestrogen, follicle stimulating hormone (FSH), luteinising hormone (LH)

Mare

Location, structure and function of the female gonad and tubular system to include: Ovaries, fallopian tube, uterus, cervix, vagina, vulva

Vulval conformation and its importance for the breeding mare including vulvoplasty (Caslick's)

Hormones controlling and produced by the female gonad to include: Oestrogen, follicle stimulating hormone (FSH), luteinising hormone (LH), progesterone.

Unit 379 Applied anatomy and physiology for equine veterinary nursing practice

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Guidance for Tutors
It is strongly advised that in terms of delivery this unit should be embedded across all other relevant units within the qualification. Learners should also be able to apply this knowledge to their professional practice

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing
The RCVS Day One Skills for Veterinary Nursing also covers the following Topics: 2.1

Unit 362 Professional relationships and communication for veterinary nursing practice

Unit level:	Level 3
GLH:	40
Unit aim:	This unit facilitates an understanding of the dynamics of communication within a veterinary setting, including inter-professional relationships and relationships with veterinary clients. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the dynamics of communication

Topics

The learner can:

1.1 Identify modes and models of communication encountered in veterinary practice

1.2 Explore factors that may affect communication

1.3 Differentiate between communication styles, to include recognition of own style of communication

1.4 Recognise how emotions affect communication

1.5 Explain the importance of effective face-to-face interaction

1.6 Explain the specific demands required in telephone and e-communication.

Range

(1.1) **Modes of communication**
Modes (telephone, face to face, video conference, internet, social media)
Models (questioning, listening)

(1.2) **Factors to include:**

Culture, age, grief and loss, use of language and sensory impairment.

(1.3) **Communication styles**

Communication styles (two-way compared to authoritative statement),

Verbal and non-verbal communication

Recognise own communication style

Methods of adapting and improving own communication with others

(1.4) **Emotions affect communication**

Awareness of and sensitivity to emotionally-charged situations such as bereavement, serious illness and euthanasia

Supporting clients in making decisions about their animal's treatment

Maintaining professional relationships with clients

Supporting colleagues under pressure.

(1.5) **Face-to-face interaction**

Social and environmental factors, body language and feedback mechanisms

(1.6) **Specific demands**

E-communication open to interpretation, professional attitudes to be adopted when using social media, telephone communication enhanced by use of paralinguistics.

Learning outcome

The learner will:

2 Be able to communicate with clients and colleagues

Topics

The learner can:

2.1 Take patient history to include actively eliciting relevant information

2.2 Produce written clinical records

2.3 Explain the process of seeking second opinion or referrals

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Range

(2.1) **Actively eliciting relevant information**

Correct interpretation of given facts, concise transmission of relevant information to a veterinary colleague

(2.2) **Written clinical records to include:**
Care plans, observations and client instructions that are clear, veterinary terminology.

(2.3) **Process of seeking second opinion or referrals**
Second opinions: supersession, procedures, RCVS Guide to Professional Conduct
Referral procedures: veterinary specialists and para-veterinary professionals**.**

Learning outcome

The learner will:

3 Understand factors affecting working relationships with clients and the veterinary team

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Topics

The learner can:

3.1 Explain factors that influence the human/ animal relationship

3.2 Describe how perceptions of other team members/roles affect working relationships

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Range

(3.1) **Factors** influencing behaviour and attitude
Culture and religion
Socio-economic status
Health status

(3.2) **Perceptions**
Perceptions of roles could be affected by age, gender, responsibility, expertise, perceived hierarchy.

Learning outcome

The learner will:

4 Understand principles of customer service

Topics

The learner can:

4.1 Explain the importance of customer service for veterinary clients and the practice

4.2 Explain factors in providing good customer service

4.3 State the key principles of handling a complaint

Range

(4.1) **Importance of customer service**

Critical to business growth

Loyalty, word of mouth recommendations, client retention

(4.2) **Factors**

Accurate information, courtesy, responsiveness, attitudes of staff, presentation of the practice and staff

(4.3) **Principles of handling a complaint**

Courtesy and objectivity

Keeping a record; the complaint, the responses provided and action taken

Addressing the subject of complaint

Dealing with aggression/ rudeness/ abuse

Knowing when to refer

Unit 362 Professional relationships and communication for veterinary nursing practice Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Guidance for tutors

Tutors could use a variety of methods such as role-play, videos of communication methods/situations, different communication styles and personality profile questionnaires as part of the delivery of this unit

Throughout delivery of this unit, tutors could make robust use of the RCVS DAY ONE SKILLS FOR VETERINARY NURSING professional behaviour tool.

Reference to other units

LO1 Topic 1.4
Maintaining professional relationships (Cross ref unit 362)

LO2
Written clinical records (Cross ref unit 380)
Veterinary terminology (Cross ref unit 380)

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topics: 2.1, 2.2

Unit 380 Applied equine welfare, health and husbandry for veterinary nurses

Unit level:	Level 3
GLH:	35
Unit aim:	This unit facilitates an understanding of principles of equine welfare and husbandry in relation to work in a veterinary practice. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the principles of equine legislation and identification

Topics

The learner can:

1.1 Summarise legislation and codes of practice in place to protect equine interests

1.2 Explain methods of identifying a range of equine patients to include:

- Breed
- Markings, colours and distinguishing features
- Owner registration (microchips and freeze-marking)
- Passports
- DNA testing

1.3 Describe the requirements for passports and record-keeping in relation to animal movements and medicine use

1.4 Summarise the role of welfare organisations to protect animal interests

Range

(1.1) **Legislation and codes of practice**

Define animal needs as stated in the Animal Welfare Act

Animal Welfare Act

Veterinary Surgeons Act

Animal Health and Welfare (Scotland) Act

Department of Agriculture, Environment and Rural Affairs (DAERA) (NI)

Department of the Environment Food and Rural Affairs (DEFRA) code of practice for the welfare of horses, ponies, donkeys and their hybrids

Department of the Environment Food and Rural Affairs (DEFRA) Welfare of Animals During Transport

FEI Veterinary Regulations

HBLB Codes of Practice

NEWC Equine Codes of Practice

BEVA to include - Protect ME antibiotic use toolkit

(1.3) **Passports and record-keeping**

Legislative requirements

The Horse Passport Regulations 2009 including imports/exports

Principles and practices of safe animal transportation

Recording of medication in passports

Learning outcome

The learner will:

2 Understand the essential factors for maintaining equine health

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Topics

The learner can:

2.1 Explain the importance of key factors in maintaining equine health

2.2 Explain the roles of essential nutrients, minerals, vitamins and supplements

2.3 Describe the differing nutritional requirements of equids

2.4 Explain the feeding requirements for hospitalised equine patients

2.5 Describe health checks used to assess equine patients

2.6 Explain how to monitor and record vital signs

Range

(2.1) **Key factors in maintaining equine patient health**

Feeding to include:

Amount and type of feed, methods of feeding, advantages and disadvantages of each e.g. turnout, hay nets, feeding from the floor, provision of water

Exercise to include:

Age (yearling to geriatric), environment required, space required, restraint/exercise method e.g. equipment required, ground or ridden work

Grooming to include:

Body and skin condition, frequency, type, equipment required

Skin care: hygiene, prevention of maceration

Principles of dental hygiene to include:

Rasping (manual and motorised), plaque control, retained deciduous teeth (diphyodont), diastema, preventative care, dietary requirements for dental conditions e.g. hay replacer diet for geriatric patients

Vaccinations to include:

Tetanus, influenza, equine herpes virus, equine viral arteritis

Vaccination dependent on:

Regime and frequency, life stage, methods/routes of administration, equipment, legal and Fédération Equestre Internationale (FEI) and Jockey club requirements

(2.2) **Roles of essential nutrients, minerals, vitamins and supplements**

Carbohydrates

Fibre

Fat including essential fatty acids

Protein including essential and non-essential amino acids

Water

Minerals

Vitamins

Efficacy of dietary supplements and use of evidence-based information e.g. musculoskeletal, respiratory, gastrointestinal, behavioural, hormonal supplements and feed balancers.

(2.3) **Differing nutritional requirements**

Nutrition as applicable to

- life stage (yearling to geriatric)
- activity levels
- condition score

Calculate nutritional needs to include energy, protein, fibre, quantity of feed: National Research Council (NRC) nutrient requirements of horses

Basic fluid requirements

(2.4) **Feeding requirements**

Altered requirements during illness and convalescence to include:

Palatability, frequency, type, amount, availability, activity levels, physiological and psychological influences, organs affected e.g. liver

parenteral feeding

Altered digestion

Factors that stimulate appetite

(2.5) **Health checks**

Systematic assessment of patient health according to life stage (yearling to geriatric), condition and/or illness

Patient assessments:

Condition of limbs, weight, skin/coat, eyes, ears, nose, mouth, genital area, tail, hooves, food, fluid, current medication

Behaviour:

Observation of demeanour to include: recognition of pain, stress and discomfort

Mobility:

According to temperament, demeanour,

Changes and restrictions to movement to include: pain, ataxia, gait, paralysis, paresis

Excretions:

Urine, faeces, reflux, tenesmus, discharges

(2.6) **Monitor and record vital signs**

Methods and techniques for monitoring vital signs to include:

Temperature, pulse, respiration, capillary refill time and mucous membranes, gut sounds and digital pulses

Descriptive and functional terms associated with temperature, pulse, respiration, capillary refill time and mucous membranes, gut sounds and digital pulses

Collection of relevant data and recording using graphical methods and charts

Recognition of normal parameters and reasons for abnormalities and variations in vital sign parameters.

Learning outcome

The learner will:

3 Understand equine parasites and methods for their control

Topics

The learner can:

3.1 Identify common equine endoparasites

3.2 Explain the effect of common equine endoparasites

3.3 Explain the prevention and treatment of equine endoparasites

3.4 Identify common equine ectoparasites

3.5 Explain the significance of common equine ectoparasites

3.6 Explain the prevention and treatment of equine ectoparasites

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Range

(3.1) **Common equine endoparasites**

Identification of common endoparasites to include:

Cyathostomes, Strongylus spp., Parascaris equorum, Oxyuris equi, Dictyocaulus arnfieldi, Anoplocephala perfoliate, Gastrophilus intestinalis

(3.2) **Effect of equine endoparasites**

Life cycles of endoparasites

Clinical signs of infestation and effect on health

(3.3) **Prevention and treatment of equine endoparasites**

Prevention

Pasture management

The importance of Faecal worm egg counts (FWEC) and FWEC reduction tests, tapeworm ELISAs (blood and saliva)

Treatments

Anthelmintics classes to include:

Ivermectin, Moxidectin, Fenbendazole, Praziquantelin (in combination with moxidectin), Pyrantel

Different anthelmintic strategies to include:

interval dosing, targeted dosing and targeted strategic dosing

understand Anthelmintic resistance

use of individual and combination wormers

Correct prescription and supply of anthelmintics to include:

Vets and SQPs

Correct administration of anthelmintics to include:

Owner education, use of weigh tapes and electronic weighbridges

(3.4) **Common equine ectoparasites**

Identification of common ectoparasites to include:

Damalinia equi., Haematopinus asini., Chorioptes and the Culicoides midge

(3.5) **Effect of equine ectoparasites**

Life cycles of ectoparasites

Clinical signs of infestation and effect on healths

(3.6) **Prevention and treatment of equine ectoparasites**

Prevention

Hygiene e.g. fomites, environmental controls e.g. daily routine, avoid turnout near open water, specialist rugs, topical applications

Treatments

Correct administration of treatments to include owner education

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Learning outcome

The learner will:

4 Be able to handle and transport equine patients safely

Topics

The learner can:

4.1 Demonstrate correct techniques for approaching, restraining and leading an equine patient, to include

- Correct use of PPE
- Application of head collar
- Quick release knot
- Examination of a hoof

4.2 Demonstrate methods of handling, restraining and training equine patients

4.3 Explain how to recognise and respond to signs of stress and aggressive behaviour

4.4 Explain how to transport equine patients safely

Range

(4.2) **Methods of handling restraining and training**

Handling and restraining to include:

Headcollar, bridles, twitch (neck, nose, ear), chifney, sedation, stocks, manual restraint

Training to include:

Classical conditioning

Operant conditioning

Counter conditioning

Habituation

Desensitisation

Training foals – imprint training

(4.3) **Signs of stress and aggressive behaviour**

Signs of stress/aggression - fear and dominance to include:
Body language, facial expressions, posture
Maintain safety of patient and personnel

(4.4) **Transport equine patients safely**

Preparing patient for transport
Preparation of vehicle and trailer
Safe loading techniques, use of loading ramps
Human health and safety
Positioning for certain injuries e.g. forelimb fracture.

Learning outcome

The learner will:

5 Be able to administer medicines to equine patients

Topics

The learner can:

5.1 Describe the techniques for administering medicines to equine patients to include:

- Oral
- Topical
- Parenteral

5.2 Administer medicines to equine patients to include the following techniques

- Oral
- Topical
- Parenteral

5.3 Safely dispose of used equipment and surplus medication

Range

(5.1) **Techniques for administering medicines**

Principles, precautions and limitations of administering oral, and topical medication

Parenteral to include:

Principles, precautions and limitations of administering medication by subcutaneous, intramuscular and intravenous injection to include asepsis

PPE to be worn

Commonly used injection sites

Requirements for nursing observation following administration of medication to include: recording, reporting and monitoring

Learning outcome

The learner will:

6 Understand the use of different types of accommodation for equine patient

Topics

The learner can:

6.1 Explain the requirements of hospital accommodation to include

- Critically ill
- Post-operative
- Convalescent

6.2 Describe safety considerations in relation to the use of accommodation and associated equipment

6.3 Explain reasons for isolation nursing

6.4 Explain requirements for isolation accommodation

Range

(6.1) **Requirements of hospital accommodation**

RCVS tier guidelines

Stable block layout and access to facilities and patient, exercise and turnout areas

Construction materials and design to include:

Essential fixtures and fittings, availability of electricity supply, availability of oxygen supply, siting, insulation, noise levels, maintenance, ease of cleaning, considerations of patient social needs, accommodation size

Maintaining environmental conditions to include:

Temperature control, ventilation, enrichment

Substrates and bedding materials:

General routine use including mucking out methods, bedding suitable for patient's condition

(6.2) **Safety considerations**

Maintenance protocols

Reporting and managing unsafe accommodation and equipment

(6.3) **Performance Reasons for isolation nursing**

Define isolation, quarantine and barrier and reverse barrier nursing

Infection and compromised immunity

(6.4) **Requirements for isolation accommodation**

Design

Location, layout, provision of equipment, ease of cleaning, maintenance, flow of personnel

Preparation for an admission

Condition of patient to include:

Barrier or reverse barrier nursing, presence of diarrhoea, infected lesions, recumbent or mobile

Equipment and materials

Use of disposable equipment and consumables, placement of waste bins and removal of waste including soiled bedding, protective clothing, fomites, hygiene protocols e.g. hand hygiene, foot dips, disinfectant mats

Conduct of staff

Planning of patient contact

Access by essential staff, avoiding unnecessary traffic

Educating lay staff and owner

Unit 380 Applied equine welfare, health and husbandry for veterinary nurses

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing also covers the following Topics: 4.1, 4.2 partially covered, 5.2, 5.3

Unit 364 Infection control in veterinary practice

Unit level:	Level 3
GLH:	20
Unit aim:	This unit facilitates an understanding of the essentials of control of infection in clinical veterinary practice. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the role of infection in animal and human health

Topics

The learner can:

1.1 Identify the common types, structure and replication of disease-producing infectious agents in relation to animal health

1.2 Explain the meaning of infection, contagion, colonisation and contamination

1.3 Describe the role of parasites in relation to disease transmission

1.4 Explain the risks of zoonosis, including animal to human transmission and vice versa

1.5 Explain the implications of antibiotic resistance for veterinary practice

Range

(1.1) **Disease-producing infectious agents**

Viruses
Bacteria
Fungi
Protozoa
Prions

(1.4) **Zoonosis**

Examples of common cross species to include:

Toxoplasmosis, leptospirosis, toxocariasis, salmonella, campylobacter, psittacosis, sarcoptes and ringworm

Risks to human health to include pregnancy

Precautions to prevent spread of infection

Notifiable and reportable animal diseases

(1.5) **Implications of antibiotic resistance**

Antibiotic resistant acquired infections to include:

Meticillin Resistant Staphylococcus Aureus (MRSA), Meticillin Resistant Staphylococcus pseudintermedius (MRSP)

Antibiotic use and compliance

Development of resistance

Methods for monitoring and minimising resistance

Learning outcome

The learner will:

2 Understand the principles of disease transmission in veterinary practice

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Topics

The learner can:

2.1 Describe how microorganisms are transmitted, to include:

- Direct and indirect spread
- Inhalation, inoculation and ingestion
- fomites and carriers, vectors
- Incubation periods

Range

(2.1) **Transmission of microorganisms**

Common routes of transmission to include: biological and mechanical vectors

Role of pathogens in triggering disease and infection

Principles of infection factors influencing occurrence direct and indirect spread

Hospital acquired infection (HAIs)

Hand hygiene, protective equipment

Fomites, carriers, reservoirs.

Learning outcome

The learner will:

3 Understand the principles of disinfection and sterilisation

Topics

The learner can:

3.1 Distinguish between the processes of disinfection and sterilisation

3.2 Explain the use of clinical antiseptics and disinfectants

3.3 Apply principles of effective clinical cleaning

3.4 Explain the process of sterilisation

3.5 Describe the operation of an autoclave

3.6 Explain how to pack, label and store autoclaved items

Range

(3.1) **Processes of disinfection and sterilisation**

Sterilisation, disinfection, asepsis and antisepsis

Purpose of these processes in relation to cleaning various clinical environments and materials

(3.2) **Use of clinical antiseptics and disinfectants**

Commonly used antiseptics/disinfectants and their effect to include:

Safe and effective usage to include consideration of choice and correct use of agent

Susceptibility of different classes of organisms (such as viruses, spores and bacteria) in relation to choice of agent

(3.3) **Principles of effective clinical cleaning**

Principles of effective cleaning:

- clinical environment
- equipment
- animal accommodation
- frequency

Accommodation usage and cleaning during outbreaks of contagious or zoonotic disease

Appropriate levels of hygiene for different areas such as consulting room, animal accommodation, operating theatre, laboratory

Specialist cleaning equipment e.g. steam cleaners, airborne disinfectants

(3.4) **Process of sterilisation** to include steam, gas, cold chemicals and gamma irradiation

Methods of sterilisation used for surgical instruments and sterile supplies

Suitability, hazards and limitations of the various methods

(3.5) **Operation of an autoclave**

Types of autoclave: downward displacement, vacuum assisted

Siting of autoclaves

Safe and effective use to include: loading, monitoring of effective sterilisation

Efficiency testing methods

(3.6) **Pack, label and store autoclaved items**

Materials used (textile and paper wraps, seal and peel pouches, nylon film, boxes, drums) to include: advantages and disadvantages

Packing methods

Labelling requirements

Sterility indicators to include classifications according to class

Storage requirements to maintain sterility

Learning outcome

The learner will:

4 Understand how to maintain personal hygiene in relation to cross-infection

Topics

The learner can:

4.1 Explain the importance of personal hygiene and dress in relation to infection control

4.2 Demonstrate effective hand hygiene

4.3 Demonstrate appropriate use of disposable protective clothing

Range

(4.1) **Importance of personal hygiene and dress**

Personal hygiene

Personal protective equipment (PPE) used to prevent disease transmission

Infection risks of jewellery, nail varnish, hair, sleeves, footwear

Risk of acquired infections, including Meticillin Resistant Staphylococcus Aureus (MRSA), Meticillin Resistant Staphylococcus pseudintermedius (MRSP), resistant streptococcus, gastro-intestinal infections (including Clostridium Difficile), dermatophytosis

(4.2) **Effective hand hygiene**

Hand-washing techniques – effective technique, WHO method

Materials – detergent antiseptics, scrubbing brushes, towels

Use of hand decontaminant alcohol gels, antiseptic washes

Advantages and consideration affecting choice of methods and materials

(4.3) **Appropriate use of disposable protective clothing** to include: gloves and aprons

Appropriate use of disposables

Changing between patients, between different uses (“clean” and “dirty” tasks)

Learning outcome

The learner will:

5 Understand the principles of infection monitoring

Topics

The learner can:

5.1 Explain the importance of infection monitoring in clinical audit

5.2 Analyse the role of the veterinary nurse in maintaining infection control

Range

(5.1) **Importance of infection monitoring**
Incidence monitoring
Routine environmental swabbing
Autoclave monitoring
Clinical audits

(5.2) **Role of the veterinary nurse in maintaining infection control** to include:
Audit
Staff training and mentorship
Animal welfare
Maintaining safe environment for colleagues and clients
Key principles of nursing care
Professional accountability

Learning outcome

The learner will:

6 Understand the principles of isolation nursing

Topics

The learner can:

6.1 Explain reasons for isolation nursing, to include infection and compromised immunity

6.2 Explain the requirements for isolation accommodation

6.3 Describe the required conduct of staff in relation to isolated cases

6.4 Explain the requirements for isolated patients

Range

(6.1) **Reasons for isolation nursing**

Define isolation, quarantine, barrier nursing, protective (reverse) barrier nursing

Reasons for patient isolation

Common infections, to include incubation periods and presentation

(6.2) **Requirements for isolation accommodation** to include: design and preparation for an admission

Location in practice, flow of personnel, ease of cleaning and removal of waste

Bedding materials, use of disposables, placement of waste bins, gloves, aprons, footwear

Condition of patient – barrier or protective (reverse) barrier nursing, presence of diarrhoea, vomiting, airborne, infected lesions

(6.3) **Required conduct of staff**

Protective clothing and hand hygiene

Planning of patient contact – avoiding unnecessary entry to isolation facility

Correct use of PPE, methodical hand hygiene

Consideration of fomites – equipment, staff items (pens, notebooks, nursing pouches) patient toys, bedding

Access by essential staff and visitors, avoiding unnecessary traffic/contact

Educating lay staff and owner

(6.4) **Requirements to include**

Reduction of stress, company, interaction and mental stimulation

Unit 364 Infection control in veterinary practice

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Guidance for tutors

LO1

Tutors could consider delivering the content of this learning outcome through an action-based research project to include a clinical auditing procedure to determine practice infection control against standards.

Reference could be made to the RCVS practice standard scheme infection control unit and Bella Moss foundation practice auditing tool. Tutors could also refer to the Veterinary Medicines Directorate (VMD) position statement when teaching learners about antibiotic resistance and utilise the BSAVA resources

LO6

Tutors could consider delivering the content of this learning outcome through a case study project where learners use an infectious case that they have observed in practice

Reference to other units

LO1 Topic 1.3

Precautions to prevent spread of infection (cross ref unit 381)

LO4 Topic 4.2

Effective hand hygiene (cross ref unit 383)

LO6 Topic 6.1

Isolation nursing (cross ref unit 381)

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topics:
3.3, 4.2, 4.3

Unit 381 Veterinary nursing support for equine patients

Unit level:	Level 3
GLH:	80
Unit aim:	This unit facilitates an understanding of the complex nursing of equine patients within a veterinary environment. It is intended to support individuals working in equine veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand how pathology affects the normal function of an equine patient

Topics

The learner can:

1.1 Describe the pathology of commonly encountered medical disorders

1.2 Explain the effects of pathophysiological states and common pathologies on the normal function of an equine patient

1.3 Recognise the significance of abnormal diagnostic test results

1.4 Explain compensatory mechanisms in equine patients

Range

(1.1) **Pathology of commonly encountered medical disorders to include:**
Circulatory disorders
Respiratory disorders
Urinary tract disorders
Endocrine disorders
Neurological disorders
Alimentary tract disorders
Reproductive tract disorders
Musculoskeletal disorders
Disorders of the sense organs
Oncological disorders

Presentation, diagnosis, veterinary treatment, nursing care

(1.2) **Effects of pathophysiological states and common pathologies** to include:
Sensory impairment
Behaviour
Reduced mobility
Impaired nutrition
Metabolic disturbance

(1.3) **Significance of abnormal diagnostic test results**
Normal parameters, abnormalities
Diagnostic tests to include:
Body fluids
Blood tests
Urine tests
Trans-cellular fluid (peritoneal and synovial fluid)

(1.4) **Compensatory mechanisms**
Pyrexia
Tachycardia, tachypnoea
Hypotension, anuria
Equine endotoxic cascade

Learning outcome

The learner will:

2 Be able to plan and deliver care for equine patients

Topics

The learner can:

2.1 Differentiate between the "medical" model of nursing and the nursing focussed model

2.2 Explain the nursing process, including a logical cycle of planning, implementation and evaluation

2.3 Apply appropriate models or frameworks to assess, plan, implement and evaluate nursing care

2.4 Demonstrate evidence-based nursing practice

2.5 Provide an appropriate nursing environment

2.6 Demonstrate effective communication with the veterinary team in relation to the evaluation and review of nursing care

Range

(2.1) **"Medical" model of nursing and nursing-focused model**

Medical model; diagnosis and treatment of disease

Nursing focussed model; supportive care based on individual patient needs

Veterinary surgeon and veterinary nursing roles

Defining:

Nursing assessment

Nursing care

Medical diagnosis

Veterinary treatment

Limitations of nursing involvement

(2.2) **Nursing Process**

Introduction to the nursing process:

Planning patient care (assessment, planning, implementation, evaluation)

Introduction to systematic veterinary framework of care

Use of care bundles

(2.3) **Models or frameworks to assess plan, implement and evaluate nursing care**

Care planning for patients with a range of commonly encountered conditions taking into account the influence of environmental, physical and psychological factors:

Circulatory disorders

Respiratory disorders

Urinary tract disorders

Endocrine disorders

Neurological disorders

Alimentary tract disorders

Reproductive tract disorders

Musculoskeletal disorders

Disorders of the sense organs

(2.4) **Evidence based nursing practice**

Sources of information to support nursing practice

Evidence-based versus tradition/common practice

Reading and evaluating literature

Critical analysis

(2.5) **Nursing environment**

Initial nursing assessment with holistic approach to patient and consideration of external factors which may affect care given or planned

Provide appropriate husbandry, considering: Age, species, condition, demeanour

Enrichment, nutrition

(2.6) **Communication with the veterinary team**

Written communication; patient records, hospital sheets, written care plans
Verbal communication; effective handover between staff members
Admission forms, discharge instructions.

Learning outcome

The learner will:

3 Be able to perform a range of nursing techniques

Topics

The learner can:

3.1 Demonstrate effective wound management techniques

3.2 Manage assisted feeding

3.3 Demonstrate physical therapy techniques

Range

(3.1) **Wound management**
Apply appropriate dressing for type of wound
Apply bandage appropriate for condition

(3.2) **Assisted feeding**
Provide appropriate assisted feeding, to include: Hand feeding, oral rehydration.
Tube feeding (maintaining patency, signs of irritation)

(3.3) **Physical therapy techniques**
Active exercise – hand-walking, joint mobilisations, active stretching
Limb/frog support – support bandage techniques, appropriate choice of bedding
Application of thermal and cryotherapy e.g. heat packs, cold hosing, ice boots.

Learning outcome

The learner will:

4 Understand the principles of wound healing and care

Topics

The learner can:

4.1 Explain the process of wound healing

4.2 Describe factors that may impede healing

4.3 Explain the principles of management of wounds

Range

(4.1) **Process of wound healing**

Physiology of healing
1st intention, 2nd intention, delayed primary suture
Recognising stages of healing
Granulation tissue
Fracture repair
Haematoma and bruising
Differentiation of normal inflammation and infection

(4.2) **Factors that may impede healing**

Infection, poor perfusion, poor nutrition, concurrent conditions, life stage, genetic factors, foreign bodies, pH, patient or client interference, movement, large tissue deficit, iatrogenic factors, necrotic tissue, tumour transformation

(4.3) **Principles of management of wounds**

Clipping technique including use of hydrogel
Use of cleansing solutions, effect on healing
Debridement – chemical and surgical
Aseptic application of appropriate dressing, use of interactive dressings
Purposes of bandaging (dressing retention/pressure/support) and techniques
Purpose, types and management of wound drainage
Casting materials and application/removal of casts
Suture removal – principles for different suture types, staples
Signs of wound breakdown
Recognising colonisation and infection
Indications for antibiotic therapy.

Learning outcome

The learner will:

5 Understand how to facilitate effective home and follow-up care

Topics

The learner can:

5.1 Analyse the factors to consider when planning for discharge, to include condition of the patient and home circumstances, transport home

5.2 Explain the core requirements for a home care plan

5.3 Analyse the requirements for effective discharge handover to an owner

5.4 Describe barriers to client concordance in the home management of a patient

5.5 Describe strategies for maintaining and improving client concordance with home care plans

5.6 Provide discharge information and guidance to owners

5.7 Evaluate the importance of follow-up nursing clinics

5.8 Explain the role of the veterinary nurse in palliative care

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Range

(5.3) **Requirements for effective discharge**

Verbal and written instructions, demonstration, establishing understanding, follow up.

(5.4) **Barriers to client concordance**

Understanding of illness and engagement with treatment aims

Expectations in relation to terminal illness e.g. malignancy, old age

Ability to provide care, suitable home environment

Economic situation

Effective communication

Assessing needs of owner before providing home care plan

(5.5) **Strategies for maintaining and improving client concordance with home care plans**

Frequency of follow-up

Points of contact; named veterinary nurse or surgeon

Achievable goals, compromises

(5.6) **Discharge information**

Advise clients on safe administration of medications, storage and disposal of medications, wound care and bandage advice

(5.7) **Value of nursing follow-up clinics**

Improved client concordance, providing client support and education, improved communication, continuity of patient care, quality of life assessment

(5.8) **Role of the veterinary nurse in palliative care**

Use of a quality of life assessment

District veterinary nursing provision

Application of in-home hospice provision

Ethics of palliative care

Learning outcome

The learner will:

6 Understand how to support a client through grief and loss

Topics

The learner can:

6.1 Explain the psychological processes of loss and grieving and summarise how these may impact on communication with a client

6.2 Evaluate the nurse's role in breaking bad news to clients

6.3 Explain how sensitive euthanasia can be accomplished within a busy veterinary practice

6.4 Evaluate services available to assist clients to cope with loss

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Range

(6.1) **Psychological processes of loss and grieving**
Grieving process, stages of grief, anticipatory grief

(6.2) **Nurse's role in breaking bad news to clients**
Time, sensitivity, empathic approach, suitable environment
Ongoing support

(6.3) **How to accomplish sensitive euthanasia**
Preparing clients, special entrance and exit for clients, handling of animal, support of clients
Unexpected euthanasia – supporting the client
Euthanasia services: slaughterhouse, hunt kennels
After death body options (burial versus cremation)
Timing of billing for euthanasia

(6.4) **Services available to assist clients to cope with loss**
Referral to external support systems e.g. bereavement counselling

Unit 381 Veterinary nursing support for equine patients

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
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The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topics: 1.3, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, and 5.6

Unit 366 Supporting the supply of veterinary medicines

Unit level:	Level 3
GLH:	20
Unit aim:	This unit facilitates an understanding of veterinary pharmacology and the supply of medicines within a veterinary environment. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the legal requirements in relation to the storage and supply of veterinary medicines

Topics

The learner can:

1.1 Explain legislation and regulatory bodies in relation to veterinary medicines

1.2 Explain the role, remit and professional responsibilities of a Suitably Qualified Person (SQP).

Range

(1.1) **Legislation, regulatory bodies and guidance in relation to veterinary medicines**

Legislation

The Medicines Act

The Veterinary Medicines Regulations (VMR) to include:

Registration of premises

Legal categories of medicines

Veterinary prescribing cascade (food and non-food animals), withdrawal periods, prescribing proprietary versus generic drugs

Storage and disposal requirements: min and max temperature recording, effect of environmental conditions

Record-keeping of pharmacy stock: broached vials, out of date stock, returned medication

The Misuse of Drugs Act

The Misuse of Drugs Regulations to include:
Schedules of controlled drugs
Requirements for ordering and delivery
Recording (controlled drugs register)
Storage and usage
Destruction

Regulatory bodies
Department for Environment, Food and Rural Affairs (DEFRA),
Veterinary Medicines Directive (VMD)
Animal Medicines Training Regulations Agency (AMTRA)

(1.2) **Role, remit and professional responsibilities of a Suitably Qualified Person (SQP)**
VMD Code of Practice
Registration and regulatory bodies e.g. AMTRA
CPD obligations.

Learning outcome

The learner will:

2 Know how to supply veterinary medicines to clients

Topics

The learner can:

2.1 Explain the requirements for a legal veterinary prescription
2.2 Interpret pharmacy terminology and abbreviations
2.3 Summarise requirements for the packaging and labelling of veterinary medicines
2.4 Explain how to calculate and dispense appropriate quantities of medication
2.5 Calculate and dispense medicines safely and effectively

Range

(2.1) **Requirements for a legal veterinary prescription**
Principles, practice and legal requirements for prescriptions to include:
valid duration of a prescription, online pharmacies, prescription charges

(2.2) **Pharmacy terminology and abbreviations**
Proprietary/trade versus generic names of medicines
Common abbreviations for routes of administration, frequency and time of administration

(2.3) **Packaging and labelling of veterinary medicines**
Principles of safe dispensing

Recommended containers for veterinary medicines
Precautions when handling medicines to include;
COSHH
Product labelling to include:
legally required information, signatures, checks on product prior to dispensing

(2.4) **Calculate and dispense medication**

Calculate
Formulae used to calculate dosages for tablets, liquid, solutions and injections
Use of calculators, importance of gross error checks
Loose tablets, bubble packs
Identify standard and international units

Dispense
Safe handling of medicines including written and oral guidance to clients
Last veterinary surgeon examination
Authorisation of prescription
Weight check
Discuss changes since last consultation
Check prescription history with regards to frequency.

Learning outcome

The learner will:

3 Know how to provide advice to clients on the administration of veterinary medicines

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Topics

The learner can:

3.1 Summarise information that should be provided to a client concerning the administration of a prescribed medicine

3.2 Demonstrate suitable techniques for administering medicine to client

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Range

(3.1) **Information that should be provided to a client**

Purpose of medication
Safe handling and disposal
Route of administration
Summary of product characteristics (SPC)
Adverse reactions
Compliance

(3.2) **Techniques for administering medicine**
Principles of effective demonstration
Pitching level of instruction and guidance
Checking understanding
Follow-up

Learning outcome

The learner will:

4 Understand the use of veterinary medicines

Topics

The learner can:

4.1 Identify examples of common classifications of medicines
4.2 Describe ways in which common classifications of medicines act and are excreted
4.3 Explain factors that can affect duration of action
4.4 Explain the mechanisms for reporting adverse reactions

Range

(4.1) **Examples of common classifications of medicines**
Parasiticides to include: ectoparasiticides, anthelmintics and endectocides
Antimicrobials
Opiate Analgesics
Cardiovascular
Diuretics
Cytotoxic/Antineoplastic
Corticosteroids
Non-steroidal anti-inflammatory drugs (NSAIDs)
Sedatives/tranquillisers
Anti-convulsants
Allergy drugs including Anti-histamines
Vaccines
Anti-emetics

(4.2) **Ways in which common classifications of medicines act and are excreted**
Action
Excretion
Uses
Nursing implications
Common side effects
Handling precautions

Contraindications

(4.3) **Factors that can affect duration of action**

Patient factors e.g. age, route of administration, hydration, multiple medications
Medicine factors e.g. effects of storage, formulation

Reasons for choice of administration route in relation to:
bio-availability of drug when given by different routes
selection according to individual patient need
speed of onset of effect
condition, illness or temperament

(4.4) **Mechanisms for reporting adverse reactions**

Recognition of adverse reactions
Reporting procedures to VMD

Unit 366 Supporting the supply of veterinary medicines

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Guidance for Tutors

LO1 Topic 1.1

Tutors could refer to the British Small Animal Veterinary Association (BSAVA) guide to the use of veterinary medicines

LO2

Tutors could refer to the RCVS Code of Professional Conduct for Veterinary Nurses Section 4.

LO2 Topic 2.5

Tutors could encourage learners to undertake sample calculations and dispensing scenarios such as role-play activities to demonstrate the administration of medications to the clients

Reference to other units

LO3 Topic 3.1

Opiate Analgesics (cross ref unit 384)

Sedatives/tranquillisers (cross ref unit 384)

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topics:
2.5, 3.2

Unit 367 Veterinary nursing support of diagnostic imaging

Level:	Level 3
GLH:	40
Unit aim:	This unit facilitates an understanding of the application of diagnostic imaging techniques within a veterinary environment. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse

Learning outcome

The learner will:

1 Know the legal requirements for conducting radiography

Topics

The learner can:

1.1 Explain the requirements for practices to be registered with the Health and Safety Executive

1.2 Describe the legal requirements for radiography in veterinary practice, to include:

- Authorised personnel
- Health and safety

1.3 Explain the requirements for exposure risk assessment and monitoring

1.4 Describe the use of personal protective equipment when dealing with radiation.

Range

(1.1) **Requirement for practices to be registered**

Local Rules and written systems of work to include;
Appointment and role of the Radiation Protection Advisor (RPA)
Appointment and role of a Radiation Protection Supervisor (RPS)
Recording methods and record keeping
Methods of monitoring and limiting exposure risks
Considerations and restrictions in pregnancy, young persons and untrained personnel

Appointments and protocols required to maintain safe working practices
Implications to personnel and patients of inaccurate or incorrect exposures to include;
Somatic effects, carcinogenic effects, genetic effects and costs

(1.2) **Legal requirements for radiography**
Ionising Radiation Regulations (IRR)

(1.3) **Requirements for exposure risk assessment and monitoring**
IRR maximum permissible doses
Effective use of dosimeters to include: type, positioning, monitoring and storage
Reducing exposure risk to include: collimating primary beam
The use of grids
Exposure factors
Record keeping of patients and exposures
Use of radiation only when clinically recommended

(1.4) **Personal protective equipment**
Protective clothing constructed of lead – aprons, thyroid protectors, gloves, sleeves, goggles/glasses, screens
Care, monitoring, maintenance and storage
Checking integrity - frequency and reporting

Learning outcome

The learner will:

2 Understand the principles of radiography as a diagnostic imaging technique

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Topics

The learner can:

2.1 Describe the properties and effects of radiation
2.2 Explain the key differences and features between computed radiography (cr) and digital radiography (dr)
2.3 Compare types of image that can be produced using radiation
2.4 Explain the features and use of digital cassettes and digital plates
2.5 Identify design features and maintenance of a radiography facility
2.6 Explain how to calculate exposure factors
2.7 Process and appraise an exposed radiograph
2.8 Describe the requirements for using radioactive isotopes in gamma scintigraphy

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Range

(2.1) **Properties and effects of radiation**

Types of x ray machines to include:
Portable, mobile and fixed tube heads

Basic equipment and its function to include:
Tube head, light beam diaphragm

The basic principles of x-ray generation to include:
Effects of varying kilovoltages (kV) and milliamperage (mA) and their relationship to include: tissue and photographic contrast and density

Primary beam and scatter production in relation to absorption by a range of animate and inanimate subjects with a range of densities

Use, types and implications of contrast imaging for:
Alimentary tract studies
Myelography
Arthography
Fistulography
Urinary tract studies
Double contrast – positive and negative
Fluoroscopy

(2.3) **Compare types of images that can be produced using radiation**

Comparison of images produced by digital radiography and those produced by Computed tomography (CT) and Gamma scintigraphy
Advantages and disadvantages using these techniques

(2.4) **Digital Cassettes and digital plates**

Understand how images are produced on a digital cassette
Structure and care of digital cassettes
Labelling, methods, information and protocols

Understand how images are produced on a digital plate
Structure and care of digital plates

Understand the key differences between digital plates versus digital cassettes and advantages and disadvantages of both

Methods of storage of images for both (including computer based) and maintaining the image and legislative requirements to include:
Digital backup provision e.g. memory sticks, off site digital storage

(2.5) **Design features and maintenance of a radiography facility**

Protocols, safelights and warnings
Maintenance, preparation and use of X-ray machines

(2.6) **Exposure factors**

Exposure calculations and influencing factors to include:

As low as reasonably practicable (ALARP)/ As low as reasonably achievable (ALARA)

Principles of inverse square law

Film focal distance (FFD)

Effects of kV, mAs

Use of exposure charts

(2.7) **Process and appraise exposed radiograph**

Importance of inputting correct submission details: selection of area of interest/algorithm when inputting patient information

Appraise diagnostic quality of a radiograph:

Density, contrast, sharpness, causes of under/over exposure, artefacts

Effects of kV and mAs on resulting exposure

Grid use relating to image quality

Understand the evaluation and manipulation of digital images to include:

How to interpret under/over exposure, risks of relying on image manipulation alone for x-ray clarity

Reasons for poor digital image quality

(2.8) **Using radioactive isotopes in gamma scintigraphy**

Use of radioactive isotopes, licensing of premises

Basic understanding of the nature of Gamma radiation

Safe handling and administration of isotopes

Care of patient during and after administration of isotopes

Safe handling and disposal of excreta.

Learning outcome

The learner will:

3 Know the principles of ultrasonography, magnetic resonance imaging (MRI), endoscopy as diagnostic imaging techniques

---

Topics

The learner can:

3.1 Explain how images are produced using ultrasonography

3.2 Describe the care and maintenance of ultrasound equipment

3.3 Explain the use of magnetic resonance imaging

3.4 Explain the principles of endoscopy and the care, maintenance and storage of equipment

3.5 Explain the requirements for patient preparation and care for ultrasound, magnetic resonance imaging and endoscopy

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Range

(3.1) **Images using ultrasonography**

Principles and types of ultrasonography and indications for use to include: Transducers and use of Doppler

Image quality to include:

Image artefact

Storage and maintenance of different size and type of probes and selection for use to include;

Musculoskeletal

Reproductive medicine

Internal medicine

Ophthalmic examination

(3.2) **Care and maintenance of ultrasound equipment**

To include:

Cleaning agents and methods

Care of scanner, probes, transducers

Obtaining ultrasonic images

Use of conductive fluids

Patient preparation and care

Storing and methods of recording images

Storage of equipment

(3.3) **Use of magnetic resonance imaging**

Role and application to include:

Basic principles of image production

Advantages and disadvantages

Health and safety considerations

Equipment choices for use with a magnetic field

(3.4) **Principles of endoscopy**

Principles of endoscopic examination to include use of rigid and flexible endoscopes

The use of endoscopes for diagnostic imaging to include: airway examination, gastroscopy

Surgical application to include: laparoscopic surgery and arthroscopy

Care, maintenance and storage of equipment including fibre optics

Methods of cleaning and sterilisation for rigid and flexible endoscopes

(3.5) **Explain the requirements for patient preparation and care**

Patient and equipment preparation, methods of patient positioning and restraint

Learning outcome

The learner will:

4 Be able to take radiographs

Topics

The learner can:

4.1 Demonstrate methods of patient restraint for radiographic examination

4.2 Demonstrate standard radiographic positions and the use of positioning aids, to include views of

- Limbs
- Head
- Spine

Range

(4.1) **Methods of patient restraint**
Methods of patient restraint (chemical and manual positioning aids)
Manual restraint, appropriate use, employee considerations
Implications of poor positioning

(4.2) **Standard radiographic positions**
Standard positioning to include:
collimation
centering
directional terminology
placement of cassette

Unit 367 Veterinary nursing support of diagnostic imaging

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:

Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

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Guidance for tutors

LO4

Tutors may wish to refer to the OSCE Tasks relating to diagnostic imaging for teaching standard positioning of patients.

Reference to other units

LO1

Legislation and health and safety is covered in unit 360.

Assessment

This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing.

The RCVS Day One Skills for Veterinary Nursing also covers the following Topics: 4.1, 4.2

Unit 382 Veterinary nursing support for laboratory diagnostics

Unit level:	Level 3
GLH:	20
Unit aim:	This unit facilitates an understanding of diagnostic testing and essential laboratory techniques in clinical veterinary practice. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand how to collect and prepare specimens for examination

Topics

The learner can:

1.1 Describe equipment, materials and methods required for sample collection, preservation and transportation

1.2 Explain how to prepare equine patients for the collection of samples

1.3 Demonstrate effective and safe sampling techniques including

- Urine
- Faeces
- Blood
- Bacterial swabs
- Hair
- Skin

1.4 Assist the veterinary surgeon in the collection of specific samples including

- Synovial fluid
- Peritoneal fluid

Range

(1.1) **Equipment materials and methods**

Samples to include:

Blood
Urine
Faeces
Exudate
Skin and hair
Tissue
Nasopharangeal swabs
Synovial fluid
Peritoneal fluid
Fine needle aspirates
Cerebrospinal fluid (CSF)
Tracheal wash, bronchial alveolar lavage (BAL)
Guttural pouch lavage

(1.2) **Prepare equine patients for the collection of samples**

Patient checks
Safe moving/handling
Appropriate positioning and restraint
Preparation of the sample site

Learning outcome

The learner will:

2 Know how to test pathological specimens

Topics

The learner can:

2.1 Explain how to use commercial test kits effectively

2.2 Explain the reasons for conducting common test techniques

2.3 Describe requirements for the safe use of laboratory equipment

2.4 Carry out common test techniques, to include:

- Microscopy
- Packed cell volume (pcv)
- Blood smear
- Faecal worm egg count (fwec)
- Test strips

- Use of analyser
- Use of refractometer

2.5 Describe safe disposal of pathological material and reagents

2.6 Recognise normal and abnormal results and how they relate to the patient's condition

2.7 Demonstrate accurate and effective reporting of test results

---

Range

(2.1) **Commercial test kits to include:**

SNAP© tests, antibody test kits, pH monitor (reagent test strips)

Using kit materials and recording results taking into account GDPR

(2.2) **Common test techniques**

Haematology and biochemistry

Urinalysis

Centrifuge, microscope and refractometers

Bacteriology and sensitivity testing

Parasitology

Reproductive swabbing in mares – methods and reasons

(2.3) **Safe use of laboratory equipment**

Care, maintenance, storage and hygiene management of:

Microscope to include: all component parts

Centrifuge and microhaematocrit tubes

Use of refractometer including specific gravity and total protein

Analysers (refer to manufacturer's instructions): quality control and standardisation including external and internal controls

Calibration and quality control

(2.5) **Pathological material and reagents**

Sharps

Consumables

Animal tissue

Legislative requirements

PPE

(2.6) **Normal and abnormal results**

Normal biochemical and haematological parameters

Significance of abnormal results, recognition of spurious results, need to re-run test

Relate test results to medical and surgical conditions and treatments

(2.7) **Reporting of test results**

Physiological significance of test results

The importance of timings and reporting in relation to colleagues and clients

Learning outcome

The learner will:

3 Know how to prepare specimens for transportation

Topics

The learner can:

3.1 Explain the requirements for the safe transport of specimens

3.2 Describe how to store specimens safely and effectively prior to dispatch

Range

(3.1) **Safe transport of specimens**

Infection control

Temperature control

Fixing/preservation of samples

Labelling of samples in appropriate containers, forms including tissue sampling

Effective handling, packaging techniques and dispatch by post and courier to external laboratories, according to regulations

(3.2) **Store specimens**

Refrigeration, segregation of pathological samples

Prevention of sample deterioration

Unit 382 Veterinary nursing support for laboratory diagnostics

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

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Assessment

This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing also covers the following Topics: 1.3, 1.4, 2.4, 2.6, 2.7

Unit 369 Veterinary operating theatre practice

Unit level:	Level 3
GLH:	40
Unit aim:	This unit facilitates an understanding of veterinary operating theatre practice for veterinary nurses. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the principles of operating theatre design and use

Topics

The learner can:

1.1 Explain the principles of operating theatre design

1.2 Explain effective operating theatre hygiene protocols

1.3 Explain the principles of planning an operating list

Range

(1.1) **Principles of operating theatre design**

Preparing an environment for surgical procedures
Operating theatre design and layout
Clean and dirty zones
Circulation of personnel and equipment between clean and dirty zones
Heating/air conditioning
Lighting (including positioning theatre lights)
Ventilation
Anti-static materials

(1.2) **Effective operating theatre hygiene protocols**

Principles of theatre cleaning: protocols for damp-dusting surfaces and equipment prior to surgery, cleaning in-between cases, at the end of surgery and scheduled deep cleaning, bacterial swabbing

(1.3) **Principles of planning an operating list**

Importance of priority to include:

Clean, clean contaminated, contaminated, dirty.

Learning outcome

The learner will:

2 Be able to dress and behave appropriately in an operating theatre

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Topics

The learner can:

2.1 Behave appropriately according to role in an operating theatre, to include:

- Communication
- Movement
- Personal hygiene
- Safety of self and others

2.2 Demonstrate effective surgical hand antisepsis

2.3 Prepare and wear operating theatre clothing

Range

(2.1) **Role**

Scrubbed nurse, circulating nurse

Behave in an operating theatre

Behaviour protocol in theatres:

Movement and posture in relation to sterile fields and scrubbed personnel

Movement of prepared patients

Designated roles and responsibilities of theatre staff, handling of equipment and patients, maintenance of sterile field

Essential verbal communication to include:

Avoiding droplet aerosol, use of masks

Personal hygiene to include:

General cleanliness, no jewellery, nail varnish, piercings

Safety to include:

Legislation, use of PPE, record keeping methods

(2.2) **Effective surgical hand antisepsis to include:**

Hand-washing, surgical scrubbing with and without a brush

Use of alcohol gels

Types of skin disinfectants

Scrubbing brushes and towels: use, disposables

Washing technique (scrubbing) to include method

Brushless scrubbing with an alcohol gel approved for surgical hand antisepsis

Gloving techniques (open and closed methods)

(2.3) **Operating theatre clothing to include:**

- scrub suit and footwear
- caps and masks
- sterile gowns
- sterile gloves

Use of scrub suits: special set for operating theatre use, cleanliness of underclothing

Footwear: non-slip, safety, anti-static, maintaining cleanliness

Types of gown (back and side tie, disposables versus cloth, effective use)

Types of glove material

Movement and posture when "scrubbed" to limit contact with non-sterile fields and potential contamination.

Learning outcome

The learner will:

3 Understand the use of operating theatre furniture and equipment

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Topics

The learner can:

3.1 Identify essential furnishings and equipment within the theatre environment

3.2 Identify the implications of inappropriate furnishings and equipment within the theatre environment

3.3 Explain the safe use and care of key operating theatre equipment

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Range

(3.2) **Implications**

Additional furnishings gather dust

Venting of autoclaves increases heat and moisture

Storage of equipment generates unnecessary through traffic

(3.3) **Use and care of key operating theatre equipment**

Adjustable tables
Theatre trolley
Wall mounted clock
Light sources
Warming devices
Diathermy
Suction
Endoscope racks
Cryosurgery equipment
Control boxes and foot pedals
Intravenous fluid therapy stand.

Learning outcome

The learner will:

4 Understand the principles of instrument care and sterilisation

Topics

The learner can:

4.1 Identify common groups of instruments and their uses

4.2 Describe the construction and care of common groups of instruments

4.3 Clean instruments effectively

4.4 Pack items for sterilisation

Range

(4.1) **Common groups of instruments** commonly used types of:

Artery forceps (small, medium and large vessel use), tissue forceps, dissecting forceps, retractors (hand-held and self-retaining), scissors, needle-holders, scalpel handles and range of blades, bowel clamps and towel clips

Orthopaedic instrumentation commonly used types of:

Bone holders, bone cutters, Rongeurs, periosteal elevator, Volkmanns curette, Jacobs chuck, osteotome, chisel, intramedullary devices (Steinmann pin, Rush pin, Kirschner wire, arthrodesis wire) bone plates (Shermann, Venables, dynamic compression plate, string of pearls), screws (Shermann, ASIF cortical and cancellous), drill and drill bits, countersink, measure, tap, screwdriver. External fixator equipment to include positive and negative profile pins, rods and clamps.

Ophthalmic instrumentation commonly used types of:

Scissors, needle-holders, forceps (use on iris and cornea), scalpel handle and blade, irrigating cannula

Dental instrumentation commonly used types of:

Probes, explorers, supragingival scaler, subgingival curette, elevators, luxators, extraction forceps

Powered and specialist instrumentation to include: air-driven dental unit, orthopaedic power tools

(4.2) **Construction and care of common groups of instruments**

Care of hinges, working surfaces, materials used for construction of instruments, maintenance, identifying damage, appropriate storage

Protection of bladed, sharp, toothed, delicate instruments,

Safe removal and handling of mounted blades and needles

Care of tungsten carbide-tipped instruments

(4.3) **Clean instruments effectively**

Procedures for cleaning and maintenance

Cleaning solutions and methods

Manual cleaning

Ultrasonic cleaners

Delicate items

Checking function

Lubrication, sharpening and safe storage

Health and safety considerations

(4.4) **Pack items for sterilisation**

Materials used for drapes and gowns:

- Anti-bacterial fabrics
- Disposal versus reusable

Folding and packing techniques

Instrument and drape wrapping, packing and labelling techniques

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Learning outcome

The learner will:

5 Be able to assist the operating surgeon

Topics

The learner can:

5.1 Assist a surgeon to don sterile clothing and gloves

5.2 Open and pass sterile materials correctly

Range

(5.1) **Assist a surgeon to don sterile clothing and gloves**
Handling, checking and opening sterile packs
Gowning technique
Open and closed gloving techniques

(5.2) **Open and pass sterile materials correctly**
Handling and passing materials and equipment to scrubbed operator
Maintaining sterile field.

Learning outcome

The learner will:

6 Understand the management of specialist equipment and materials during a surgical procedure

Topics

The learner can:

6.1 Identify additional specialist equipment
6.2 Identify types of wound closure material and explain their properties
6.3 Explain the use of instrument trolleys and mayo tables
6.4 Demonstrate safe techniques for handling and passing instruments
6.5 Explain how to keep track of instruments and swabs
6.6 Describe the safe disposal of hazardous materials, to include:

- Swabs
- Suction bottle contents
- Tissue

Range

(6.1) **Additional specialist equipment to include:**
Diathermy, cryosurgery. suction machine and suction tips (Poole, Yankauer and Frazier), endoscopy (rigid and flexible)

(6.2) **Types of wound closure material** advantages and disadvantages of each

- Absorbables
- Non-absorbables
- Synthetic and natural materials
- Mono and polyfilaments

Specific contra indications for suture materials

Types of suture needles, appropriate use, advantages and disadvantages, swaged and unswaged

Basic suture patterns to include:

Simple, continuous, interrupted, mattress, cruciate, Ford interlocking, purse string, subcutaneous and the indications for their use

Alternative suture materials and methods to include:

Glue and staples

(6.3) **Use of instrument trolleys and Mayo tables**

Layout of equipment in anticipated order of usage

Management of mounted needles and blades

(6.4) **Safe techniques for handling and passing instruments**

Method of passing surgical instruments

Management of needles and blades

Anticipating needs of the surgeon according to stage of procedure and layout of equipment

Assisting the surgeon with tissue handling and retraction

(6.5) **Keep track of instruments and swabs**

Methodical layout, surgical counting (surgical safety checklist) (SSC)

(6.6) **Safe disposal of hazardous materials specifically from theatre**

Swabs

Suction bottle contents

Tissue (including body parts and cadavers)

Unit 369 Veterinary operating theatre practice

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:

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Reference to other units

LO2 Topic 2.2

Types of skin disinfectants (Cross ref unit 364)

LO3 Topics 3.2 and 3.3

Warming devices (Cross ref unit 369)

Patient transport systems Cross ref unit 380)

LO4 Topics 4.2 and 4.3

Ultrasonic cleaners (Cross ref unit 360)

Folding and packing techniques (Cross ref unit 364)

Instrument and drape wrapping, packing and labelling techniques

(Cross ref unit 364)

LO6 Topic 6.6

Tissue (including body parts and cadavers) (Cross ref unit 360)

Assessment

This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topics:
2.1, 2.2, 2.3, 4.3, 4.4, 5.1, 5.2, 6.4

Unit 383 Peri-operative veterinary nursing support of equine patients

Unit level:	Level 3
GLH:	40
Unit aim:	This unit facilitates understanding of peri-operative nursing care principles relating to equids within a veterinary environment. It is intended to support individuals working in equine veterinary practice and who are working towards professional registration as a veterinary nurse. This unit is linked to the RCVS Day 1 Skills and RCVS Day 1 Competences for Veterinary Nursing

Learning outcome

The learner will:

1 Know how to prepare an equine patient for surgery

Topics

The learner can:

1.1 Explain the information to be obtained from the animal's owner

1.2 Explain the preparation of an equine patient for general anaesthesia, to include:

- Pre-anaesthetic checks
- Shoe removal
- Fasting
- Premedication
- Use of a surgical safety checklist (ssc)

1.3 Describe requirements for clipping and skin preparation, to include:

- Care and use of clippers
- Identification of site
- First skin scrub

1.4 Explain the use of prophylactic medication to include:

- Antibiotics, tetanus toxoid and/or antitoxin, analgesia

Range

(1.1) **Information to be obtained from the animal's owner**

Reason for admission: elective and emergency
Contact details, animal's normal routine, including feeding and exercise
Period of starvation
General condition, relevant veterinary history, any change since last consultation
Consent
Contact point and time to call given to owner
Passport, to include recording of medicines

(1.2) **Preparation of an equine patient for general anaesthesia**

Procedures carried out to include:

- Withholding food
- Checking vital signs
- Grooming and tail bandaging
- Mouth rinsing
- Pre anaesthetic blood sample

(1.3) **Requirements for clipping and skin preparation**

Aims of skin preparation, techniques and procedures:
Identification and marking of surgical site
Restraint and handling
Shoe removal
Clippers
Skin disinfectants/antiseptics
Swabbing technique

Learning outcome

The learner will:

2 Understand the requirements for immediate post-operative care of equine patients

Topics

The learner can:

2.1 Explain the requirements for handover from the operating theatre

2.2 Describe post-operative observations

2.3 Summarise the principles of effective post-operative pain management

Range

(2.1) **Requirements for handover**

Preparation of suitable recovery accommodation

Transition from anaesthetic recovery to accommodation

Handover information:

Vital signs, wound integrity and discharge, time and quality of recovery, evidence of neuropathies or myopathies

Treatment instructions

Importance of communication and record keeping

(AC2.2) **Post-operative observations**

Vital signs, pain monitoring, urine output, wound appearance and drainage

Identification of common post-operative complications

(2.3) **Principles of effective post-operative pain management**

Analgesics commonly used peri and intra-operatively

Multi-modal analgesia

Monitoring effective pain relief (physiological signs of pain), use of pain scoring charts

Epidural analgesia, local/regional blocks

Learning outcome

The learner will:

3 Understand post-operative nursing requirements for specific surgical procedures

Topics

The learner can:

3.1 Summarise the post-operative nursing requirements for specific surgical procedures

Range

(3.1) **Post-operative nursing requirements**

Prevention of post-operative complications

Accommodation

Feeding and fluids

Temperature regulation

Pain management

Reduction of stress

Wound care

Mobility

Hygiene

Specific surgical procedures

Standing procedures

Abdominal procedures

Orthopaedic procedures

Head and neck procedures

Emergency and electiveLearning outcome

Unit 383 Peri-operative veterinary nursing support of equine patients

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:

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Assessment

This unit is assessed by a paper test.

Unit 384 Principles of supporting veterinary anaesthesia

Unit level:	Level 3
GLH:	40
Unit aim:	This unit facilitates an understanding of anaesthesia and anaesthetic monitoring in clinical veterinary practice. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the principles of anaesthesia

Topics

The learner can:

1.1 Define different methods of anaesthesia

1.2 Explain anaesthetic terminology

1.3 Explain the physiology of general anaesthesia

1.4 Explain stages and levels of anaesthesia

1.5 Calculate fresh gas flow rate according to weight and circuit factor

Range

(1.1) **Methods of anaesthesia** to include:

- General
- Epidural
- Regional
- Local
- Topical

Advantages and disadvantages

Onset and duration of action of commonly used local anaesthetic solutions

Preparation and application of local anaesthetic techniques to include: peri-neural and intra-articular anaesthesia

Patient preparation

(1.2) **Anaesthetic terminology** to include:
Minute volume, tidal volume, dead space (equipment and physiological)

(1.3) **Physiology of anaesthesia**
Physiology of sedation and general anaesthesia, "triad of anaesthesia"
Exchange of gases in the lung and principles of tissue respiration
Effect of anaesthetic agents on the autonomic nervous system especially renal and hepatic perfusion and function

(1.5) **Fresh gas flow rate**
Calculation formulae
Use of calculators and pre-prepared charts
Gross error checks
Significance of circuit factors.

Learning outcome

The learner will:

2 Know the function of anaesthetic drugs

Topics

The learner can:

2.1 Explain the function of key groups of anaesthetic drugs, to include:

- Intravenous and gaseous anaesthetics
- Intramuscular anaesthetics
- Sedatives
- Analgesics
- Muscle relaxants

Range

(2.1) **Function of key groups of anaesthetic drugs**
Premedication:
Commonly used agents, including their side effects (ACP, alpha 2 agonists, opioids
Principles of analgesia and the advantages of pre-emptive analgesia (Non-steroidal Anti-inflammatory Drugs (NSAIDs), opioids and local anaesthetic techniques)

Induction:

Induction and agents/combinations of agents commonly used, including side effects for horses, donkeys and foals

Maintenance of anaesthesia:

Methods and agents including their side effects (carrier gases, volatile agents, total intravenous anaesthesia (TIVA)) and "top-up" doses

Recovery:

Sedation

Use of reversal agents (foals)

Learning outcome

The learner will:

3 Understand the function of anaesthetic equipment

Topics

The learner can:

3.1 Explain the function and maintenance of key parts of an anaesthetic machine

3.2 Describe the function of re-breathing systems

3.3 Describe the use and maintenance of types of endotracheal tube

3.4 Explain the safety checks to be made of anaesthetic equipment, to include

- Endotracheal tubes
- Breathing systems
- Anaesthetic machines
- Pollution control systems
- Ventilator

3.5 Explain the use of monitoring equipment, to include

- Capnograph
- Pulse oximeter
- Electro-cardiograph
- Non-invasive and invasive blood pressure monitoring
- Blood gas analysis

Range

(3.1) **Function and maintenance**

Identification of key parts:

Gas supply, pressure gauge, flow-meters, vaporiser, emergency flush, pin index system, alarm systems

Oxygen and gas delivery systems:
Piped, cylinders, oxygen generators

(3.2) **Function of re-breathing systems**

Gas flow in a circle circuit

Gas flow in a To and Fro circuit

The advantages and disadvantages of Intermittent Positive Pressure Ventilation (IPPV) and its practical use

(3.3) **Types, use and maintenance of endotracheal tube**

Cuffed and re-useable

Correct placement (breath sounds, chest movement)

Cuff inflation

Materials: Silicone, rubber

Cleaning and maintenance protocols

(3.4) **Safety checks to be made of anaesthetic equipment**

Tube cuff integrity

Circuits: Intact and not leaking, APL valve works and open, including testing methods if using an oxygen generator

Machine: Oxygen flush working, gas supply connected and sufficient, vaporiser filled

Scavenging – system connected and working

(3.5) **Use of monitoring equipment**

Indications for use, correct application of equipment to patient, recognition of abnormal readings

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Learning outcome

The learner will:

4 Understand anaesthetic preparation and induction

Topics

The learner can:

4.1 Describe the use of the anaesthetic risk score

4.2 Explain how to minimise the risk to specific patients throughout anaesthesia

4.3 Identify the materials and equipment needed for induction of anaesthesia

4.4 Support the anaesthetist during anaesthetic induction

4.5 Explain the principles of effective intubation

4.6 Explain the safe use of patient transport systems

Range

(4.1) **Anaesthetic risk score**

American Association of Anaesthesiologists anaesthetic risk score

(4.2) **Anaesthetic risk to specific patients**

Toxic patients

Limb fractures

Caesarean section

Neuropathy

Existing conditions e.g. rhabdomyolysis, metabolic disturbances

Colic

(4.3) **Materials and equipment needed** to include:

Consumables

Drugs and Intravenous fluids

Endotracheal tubes

Monitoring equipment

(4.4) **Support the anaesthetist during anaesthetic induction**

Restraint and positioning of the patient during induction

Different methods of induction e.g. free fall, support from handlers, swing door, tilt table, sling, field anaesthesia

Positioning of patient for surgery, use of positioning aids

(4.5) **Principles of effective intubation**

Correct size of tube

Patient positioning

Correct inflation of cuff

Risks and complications

(AC4.6) **Patient transport systems**

Transfer equipment including winch systems and hoists

Learning outcome

The learner will:

5 Understand the principles of monitoring an anaesthetised equine patient

Topics

The learner can:

5.1 Explain observations and recording requirements for an anaesthetised patient

5.1 Describe monitoring equipment observations

5.1 Explain methods of recovery, positioning and monitoring during anaesthetic recovery

5.1 Describe common post anaesthetic complications

Range

(5.1) **Observations**

Frequency of observations
Eye position and prevention of corneal ulceration
Muscle tone, reflexes
Temperature monitoring
Reporting of significant changes
Maintaining anaesthetic record
Level of consciousness
Recognise excessive blood loss
Recognise the effect of tourniquets
Urinary catheterisation to monitor urine output

(5.2) **Monitoring equipment observations**

Power supply, connections
Supply of gases and volatile agents
Pulse oximetry
Electrocardiogram
Blood pressure monitoring
Capnography
Blood gas monitoring
Correlation of equipment read-outs with condition of patient
Routine servicing and calibration of equipment

(5.3) **Methods of recovery** to include: Assisted and non-assisted recovery i.e. ropes, pulleys, slings, pool recovery

Field recovery techniques

Positioning and monitoring to include:

Recognising when to extubate
Observations during recovery
Effects of patient positioning on respiratory and cardiovascular function

(5.4) **Post anaesthetic complications** to include:

Myopathy
Neuropathy
Fractures

Learning outcome

The learner will:

6 Know how to recognise and respond to anaesthetic emergencies

Topics

The learner can:

6.1 Identify clinical signs associated with
- Respiratory obstruction
- Cardiac arrest

6.2 Explain the management of resuscitation

6.3 Explain how to manage equipment failure

Range

(6.2) **Management of resuscitation**

Contents of and use of anaesthetic emergency box to include:
Drugs, consumables, equipment
Drugs in resuscitation
Cardio-pulmonary resuscitation
Effective resuscitation protocols
Airway management

(6.3) **Manage equipment failure**

Emergency lighting, manual ventilation, management of surgical procedure, use of generators.

Unit 384 Principles of supporting veterinary anaesthesia

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics . The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topics:
1.5, 4.4

Unit 372 Preparing for professional registration

Unit level:	Level 4
GLH:	35
Unit aim:	This unit will assist student veterinary nurses in preparing for entry on to the RCVS Register for Veterinary Nurses. They will explore the concept of professional accountability and their duties as registered practitioners. They will consider some of the moral and ethical conflicts that may be encountered in caring for animals and working with colleagues. They will also explore strategies for resolving such conflicts and/or how to seek appropriate expert help.

Learning outcome

The learner will:

1 Know the legal framework for veterinary nursing practice

Topics

The learner can:

1.1 Summarise the UK legal system to include criminal and civil law, sources of law

1.2 Interpret the provisions of the Veterinary Surgeons Act, to include

- Meaning of Schedule 3
- Scope of veterinary nursing practice.

Range

(1.1) **UK legal system**

Relevant to jurisdiction (England and Wales, Scotland, Northern Ireland)

Structure of the court system

Statute and common law, precedent

(1.2) **Provisions of the Veterinary Surgeons Act**

Purpose of the Veterinary Surgeons Act

Treatment by non-veterinary surgeons under Schedule 3, to include registered veterinary nurses, student veterinary nurses and lay staff

Learning outcome

The learner will:

2 Understand the accountability of veterinary nurses

Topics

The learner can:

2.1 Analyse the features of professional status

2.2 Explain the purpose and principles of professional regulation to include statutory and voluntary regulation, self-versus independent regulation

2.3 Explain the functions of a professional regulatory body

2.4 Summarise the RCVS regulatory Registration Rules in relation to veterinary nurses to include:

- RCVS veterinary nurse registration rules
- RCVS veterinary nurse conduct and discipline rules

2.5 Interpret the RCVS code of professional conduct for veterinary nurses.

Range

(2.1) **Features of professional status**

Education, accountability, autonomy, public regard

History and status of veterinary nursing

(2.2) **Purpose and principles of professional regulation**

Public interest, protection of the vulnerable

Examples of statutory and voluntary regulation

Meaning of professional self-regulation

Independent regulation, government regulatory agencies

(2.3) **Functions of a professional regulatory body**

Maintaining register

Public protection

Publishing codes of conduct

Standard-setting to include: Education, standards of practice, CPD and re-validation

Investigation of complaints to include: Role of the Veterinary Nurse Preliminary Investigation Committee and the Veterinary Nurse Disciplinary Committee, disciplinary sanctions

Compare with other (non-veterinary) regulators e.g. General Dental Council, Nursing and Midwifery Council

(2.4) **RCVS regulatory Registration Rules in relation to veterinary nurses**

Generation of the Regulatory Registration Rules, RCVS Supplemental Charter

RCVS Veterinary Nurse Registration Rules:

Entry, retention, removal and restoration onto the register

RCVS Veterinary Nurse Conduct and Discipline Rules:

Investigation and adjudication of complaints, removal under direction of the Veterinary Nurse Disciplinary Committee, restoration onto the register under direction of the Veterinary Nurse Disciplinary Committee, appeals

(2.5) **RCVS Code of Professional Conduct for veterinary nurses**

Provisions of the Code

Application to practical situations

Obtaining help and advice

Learning outcome

The learner will:

3 Understand the application of ethical principles

Topics

The learner can:

3.1 Summarise ethical schools of thought, to include utilitarianism, deontology and virtue ethics

3.2 Identify ethical problems arising in veterinary practice

3.3 Analyse patient care issues using ethical principles

Range

(3.1) **Ethical schools of thought**

Morals vs ethics

Personal values and beliefs- limitations and conflict in veterinary practice

Examples of ethical theories e.g. utilitarianism, deontology, virtue ethics

Comparison of decision-making processes based on ethical theories

Recognising the basis of arguments

(3.2) **Ethical problems**

Potential conflicts e.g. Informed consent, economic drivers of treatment, animal abuse, euthanasia, addressing poor practice

(3.3) **Patient care issues**

Resolving dilemmas

Where to go for help; representative organisations, Industry helplines

Learning outcome

The learner will:

4 Understand the principles of consent to veterinary treatment

Topics

The learner can:

4.1 Explain the legal requirements for consent to treatment, to include treatment without consent

4.2 Analyse the features of informed consent

4.3 Identify potential barriers to informed consent in practice

Range

(4.1) **Legal requirements for consent to treatment**

Define consent, express and implied consent, written and verbal,

Competency and capacity

The necessity principle

Design of consent forms

(4.2) **Features of informed consent**

Information giving versus understanding, how much understanding is sufficient, assessing understanding

The RVN's role in obtaining informed consent

(4.3) **Potential barriers to informed consent**

Time, training of staff, emergency situations, language, unethical practices

Learning outcome

The learner will:

5 Understand Legal and ethical duties to clients, colleagues and animals

Topics

The learner can:

5.1 Explain the principle of Duty of Care in relation to clients, colleagues and animals

5.2 Critically analyse ethical issues surrounding the support of colleagues and clients, to include whistleblowing

Range

(5.1) **Principle of Duty of Care**

Define duty of care
Legal and moral obligations
Principles of negligence, remedies in law
Animal Welfare Act, statutory duties to animals
Practising within own level of competence, resisting inappropriately delegated work
Maintaining CPD
Professional development from “beginner to expert”

(5.2) **Ethical issues surrounding the support of colleagues and clients**

Addressing problems
Recognition of potential problems e.g. stress, mental health, substance abuse
Protocols for whistleblowing, when should it be considered
Breaching confidentiality in the public interest
Where to seek advice and help (link to 3.3)

Unit 372 Preparing for professional registration

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:

The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:

Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

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Guidance for Tutors

LO1

Tutors could investigate opportunities to visit the open gallery of local law courts

LO3

Tutors could consider running practical debates with learners, using principles in 3.1 and real or supplied problems from veterinary practice

LO5 Topic 5.2

Where to seek advice and help (links to Topic 3.3)

Assessment

This unit is assessed by an external set assignment which is internally marked by the Centre and externally quality assured. This unit is also assessed by a paper test.

The assignment should be no more than 3,500 words in length and a score of 50% is required to pass.

For full details, please see the Assessment Pack.

Unit 385 Equine veterinary nursing emergency and critical care

Unit level:	Level 3
GLH:	40
Unit aim:	This unit prepares learners to provide first aid treatment to injured equids and nursing care to critically ill equine patients within a veterinary environment. It is intended to support individuals working in equine veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the principles of equine first aid

Topics

The learner can:

1.1 Define the scope of first aid, mentioning legal entitlement to provide first aid to equids

1.2 Explain the principles of first aid management and treatment

1.3 Explain the first aid management of equids

1.4 Demonstrate first aid treatment techniques

1.5 Describe information to be passed to the veterinary team regarding a treated first aid casualty

Range

(1.1) **Scope of first aid**
Meaning of first aid care
Legal difference between first aid and emergency veterinary treatment
Provisions of the Veterinary Surgeons Act

(1.2) **Principles of first aid management and treatment**
Safe environment, safety of first aider and others

Systematic assessment of casualty: airway, breathing, circulation, neurological status, other injuries

Safe methods of movement of casualty: emergency immobilisation, prevention of further injury, transportation of patient

(1.3) **First aid management of equids**

Haemorrhage and wounds to include:

Types of haemorrhage, methods of haemorrhage control (pressure application, suitable bandage, tourniquet), penetrating injuries, foreign bodies

Musculoskeletal injuries to include:

Immobilisation of limbs (bandaging, splinting), patient immobilisation

Abdominal pain to include:

Safety considerations relating to humans. horses and environment

Cast, recumbent/unable to rise and non-ambulatory horses to include:

Safety considerations relating to humans, horses and environment, safe patient recovery techniques, use of glides, role of emergency services

Management of burns and scalds

Immediate treatment, suitable applications

Ingestion of poison

Common poisons e.g. ragwort, yew, sycamore, veterinary poisons information service

(1.5) **Information**

Time and nature of injury, treatment given, condition of animal throughout, first aider contact details, owner details if known

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Learning outcome

The learner will:

2 Know how to support emergency veterinary care

Topics

The learner can:

2.1 Explain the concept of triage

2.2 Explain preparations for admission of an emergency case

2.3 Explain the contents and maintenance of an emergency “crash box” or trolley

2.4 Explain how to support the veterinary surgeon during resuscitation and stabilisation procedures.

Range

(2.1) **Concept of triage** to include:

Definition of triage

Communication with client/lay person

Systematic information gathering, use of protocols

Identify situations that constitute emergencies

Differentiate between commonly encountered emergency situations and those requiring attention through appointments in the immediate future

(2.2) **Preparations for admission of an emergency case** to include:

Admission area, equipment, consumables and operating theatre

Clearing working space, deferring non-urgent patients if necessary

Fetch emergency box, prepare IV fluids, swabs, dressings

Notify appropriate personnel

(2.3) **Contents and maintenance of an emergency "crash box" or trolley**

Contents to include airway management devices, medications and consumables

Routine checking and rotation of contents, replenishment after use

(2.4) **Support the veterinary surgeon during resuscitation and stabilisation procedures**

Assist with stabilisation of case

Importance of maintaining organisation, record-keeping, safety: keep floor clear, keep track of equipment and sharps

Learning outcome

The learner will:

3 Understand the principles of intravenous catheterisation and intravenous fluid therapy

Topics

The learner can:

3.1 Explain the principles of intravenous cannulation

3.2 Explain the care of an intravenous catheter

3.3 Explain how fluid balance is maintained

Range

(3.1) **Principles of intravenous cannulation**

Indications for cannulation

Identification of access points and veins

Intravenous catheter types and the theory of catheter placement
Risks and complications, e.g. extravasation, thrombosis, infection

(3.2) **Care of an intravenous catheter**
Site monitoring, routine catheter care, hygiene, catheter fixing
Catheter care bundles, ultrasonography
Maintaining patency, heparinisation, dealing with venous spasm, blocked catheter
Managing parenteral nutrition

(3.3) **Fluid balance is maintained**
Assessment of fluid balance, reasons for altered fluid and electrolyte balance, e.g. altered intake/output, abnormal losses
Selection of suitable fluids and administration equipment
Calculating fluid requirements using formulae
Gravity feed infusions and infusion pumps

Learning outcome

The learner will:

4 Understand special intensive nursing care techniques

Topics

The learner can:

4.1 Explain the principles of administering blood and blood products
4.2 Explain the principles of respiratory therapy
4.3 Explain the principles of monitoring critically ill patients

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Range

(4.1) **Principles of administering blood and blood products**
Types of blood and blood products and indication for use
Selection of suitable donor, collection and storage of blood products
Administration of blood and blood products, equipment required, transfusion rates
Recognition of reactions, action to take

(4.2) **Principles of respiratory therapy to include:**
Oxygen supplementation, tracheostomy, thoracic drains, pulse oximetry and blood gas analysis

(4.3) **Principles of monitoring**
Frequency of checks

Recognition of significant changes to vital signs
ECG
Neurological function
Record keeping in intensive care, intensive care charts

Learning outcome

The learner will:

5 Know nursing requirements for equine patients requiring intensive care

Topics

The learner can:

5.1 Summarise the intensive nursing requirements of equine patients,

5.2 Explain the physiology, recognition and management of shock

Range

(5.1) **Intensive nursing requirements of equine patients to include:**
Accommodation
Feeding and fluids
Temperature regulation
Pain management
Reduction of stress
Mobility
Hygiene, prevention and management of decubitus ulcers

Application of the nursing requirements listed above to:
Severe systemic disturbance
Recumbent patient
Fracture
Colic

(5.2) **Shock**
Types of shock – cardiogenic, hypovolaemic, distributive
Physiology of hypovolaemic shock, compensatory mechanisms
Signs of shock
Fluid replacement
Ongoing care and monitoring

Unit 385 Equine veterinary nursing emergency and critical care

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Assessment
This unit is assessed by a paper test, RCVS Day One Skills for Veterinary Nursing

The RCVS Day One Skills for Veterinary Nursing covers the following Topic: 1.4

Unit 386 Principles of equine reproduction and neonatal care

Unit level:	Level 3
GLH:	40
Unit aim:	This unit facilitates an understanding of equine reproduction and addresses the key specialist nursing requirements of equine neonates. It is intended to support individuals working in equine veterinary practice and who are working towards professional registration as a veterinary nurse.

Learning outcome

The learner will:

1 Understand the reproduction and breeding of equids

Topics

The learner can:

1.1 Explain the key principles of genetic inheritance and define terms

1.2 Describe equid breeding cycles

1.3 Explain the essentials of intra-partum care

1.4 Explain how to support owners in preparation for parturition.

Range

(1.1) **Key principles of genetic inheritance**

Essential genetic terms (phenotype, genotype, allele)

Inheritance, breeding strategies, hereditary diseases

Reproductive technologies: Artificial insemination, embryo transfer

(1.2) **Breeding cycles**

Puberty, ovulation, fertilisation, reproductive cycles and behaviours including associated hormones

Regulation of breeding cycles:

Day length cycles and temperatures
Gestation period
Drugs based on hormonal action

(1.3) **Essentials of intra-partum care**
Stages of foetal development
Hormonal controls
Nutritional requirements of the mare
Parturition: Normal parturition
Stages of labour to include:
Complications of labour and delivery including dystocia and caesarian section
Post-partum care
Recognition of maternal post-partum complications

Learning outcome

The learner will:

2 Understand normal foal physiology and development

Topics

The learner can:

2.1 Explain key differences between the major body systems of neonates, foals and adult equids
2.2 Explain the development of immunity in equine neonates
2.3 Describe the normal adaptive behaviour and reflexes of a newborn foal.

Range

(2.1) **Key differences**
Immune system
Cardiovascular system
Respiratory system
Renal system
Gastro-intestinal system
Temperature control

(2.2) **Development of immunity in equine neonates**
Passive immunity, significance of colostrum
Importance of hygiene

(2.3) **Normal adaptive behaviour and reflexes of a newborn foal**
Righting and suck reflexes

Standing
Urination, passing of meconium
Behaviour e.g. affinity for the mare, locating the udder
Apgar scoring

Learning outcome

The learner will:

3 Understand foal nutrition and feeding

Topics

The learner can:

3.1 Summarise the process of lactation in the mare

3.2 Explain the nutritional requirements of foals, to include

- Neonate
- Juvenile foal
- Weanling

3.3 Explain the requirements of foal weaning

Range

(3.1) **Process of lactation in the mare**
Nutritional requirements of mare
Mammary function, hormonal control of lactation
Milk let-down, painful udders, mastitis
Agalactia
Constituents of colostrum and milk
Process of milking the mare if required

(3.2) **Nutritional requirements of foals**
Milk requirements
Development of intestinal function
Provision of additional feed
Monitoring growth rate

(3.3) **Requirements of foal weaning**
Weaning: age, feed requirements
Separation from the mare
Monitoring of mare and foal
Socialisation of foal

Learning outcome

The learner will:

4 Understand the routine veterinary care of normal foals

Topics

The learner can:

4.1 Explain requirements for handling, health checks and foot care

4.2 Summarise normal protocols, for parasite control in foals

4.3 Summarise the normal vaccination protocols for foals

Range

(4.1) **Handling, health checks and foot care**
Catching and methods of restraint
Elements of a health check
Normal heart rate, respiratory rate and temperature
Farriery requirements

(4.2) **Normal protocols for parasite control in foals**
Parasites affecting foals
Testing for parasites
Prevention methods and treatment

(4.3) **Normal vaccination protocols**
Appropriate age to start vaccinating foals
Diseases which can be vaccinated against
Vaccination protocols and records

Learning outcome

The learner will:

5 Understand the nursing requirements of orphan foals

Topics

The learner can:

5.1 Explain the care and handling requirements of orphan foals

5.2 Explain the feeding requirements of orphan foals

5.3 Explain the importance of the fostering process

Range

(5.1) **Care and handling requirements**

Interaction with other equids or companion animal

Minimising unnecessary contact with humans and preventing association of human contact with food provision

Housing requirements

(5.2) **Feeding requirements of orphan foals**

Required nutritional intake for optimal growth

Methods of monitoring growth

Bottle feeding, bowl feeding and creep feeding methods and equipment

(5.3) **Fostering process**

Foster mare selection – national foaling bank

Methods: mare restraint, administration of hormones, application of scent

Considerations for health & safety

Learning outcome

The learner will:

6 Understand the nursing requirements of sick foals

Topics

The learner can:

6.1 Know commonly encountered conditions of the equine neonate and their disease processes

6.2 Explain the accommodation requirements for nursing foals

6.3 Explain the essential nursing requirements of recumbent foals

6.4 Explain the nursing support of foals undergoing investigations and supportive therapies

Range

(6.1) **Conditions of the equine neonate to include:**

Neonatal maladjustment syndrome, failure of passive transfer, sepsis, neonatal isoerythrolysis, meconium retention, bladder rupture, immunodeficiencies, diarrhoea, septic arthritis, entropion, congenital cardiac abnormalities, rib fractures

(6.2) **Accommodation requirements for nursing foals**

Bedding materials, infection control, temperature

(6.3) **Essential nursing requirements of recumbent foals**

Monitoring: vital signs, urine output, behaviour

Temperature control: ambient temperature, use of rug, bandages

Position: respiratory function, skin care, pressure relief, change of bedding

Physiotherapy: prevention of flexural deformity, introducing exercise

Nutrition and fluids

Hygiene, infection control

Umbilical

Eye care

Urination, defecation, to include administration of enemata

(6.4) **Nursing support of foals undergoing investigations and supportive therapies**

Oxygen therapy

Blood sample collection: Venous and arterial

IgG monitoring

Administration of blood and plasma

Blood pressure monitoring, pulse oximetry monitoring, blood gas analysis and Glucose testing

Stabilisation of sick foal

Fluid requirements

Parenteral fluids and nutrition

Urinary catheterisation

Nasogastric feeding

Diagnostic imaging

Unit 386 Principles of equine reproduction and neonatal care

Supporting Information

Evidence requirements

You must provide your assessor with evidence for all the learning outcomes and Topics. The evidence must be provided in the following ways taking into account any of the special considerations below.

Special considerations:
The nature of this unit means that most of your evidence must come from real work activities.

Simulation can only be used in exceptional circumstances for example:
Where performance is critical or high risk, happens infrequently or happens frequently but the presence of an assessor/observer would prevent the Independent Advocacy relationship developing.

The evidence must reflect, at all times, the policies and procedures of the workplace, as linked to current legislation and the values and principles for good practice in Independent Advocacy.

Assessment
This unit is assessed by a paper test.

Appendix 1 Relationships to other qualifications

Links to other qualifications

Mapping is provided as guidance and suggests areas of commonality between the qualifications. It does not imply that learners completing units in one qualification have automatically covered all of the content of another.

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that leaners meet requirements of all units/qualifications.

Literacy, language, numeracy and ICT skills development

These qualifications can develop skills that can be used in the following qualifications:

Functional Skills (England) – see www.cityandguilds.com/functionalskills
Essential Skills (Northern Ireland) – see www.cityandguilds.com/essentialskillsni
Essential Skills Wales – see www.cityandguilds.com/esw

Appendix 2 Student guide and materials

Student forms

For student forms that need to be completed and referred to throughout the veterinary nurse training, please go to the RCVS website www.rcvs.org.uk

Being a student veterinary nurse

The Royal College of Veterinary Surgeons (RCVS) is relevant to you, as a student veterinary nurse. The RCVS is the professional regulatory body for veterinary surgeons and veterinary nurses. This means that the RCVS protects the public interest and animal welfare through assuring professional standards. In the case of veterinary nurses, the RCVS maintains a ~~List~~ Register of veterinary nurses and sets the standard of training for nurses intending to register.

Qualifying to be a veterinary nurse

In order to become eligible to register as a veterinary nurse on the RCVS Register of Veterinary Nurses you must complete qualifications that are recognised by the Royal College of Veterinary Surgeons as the professional regulator. These can be:

- Vocational qualifications awarded by City & Guilds (e.g. Level 3 Diploma in Veterinary Nursing)

In addition, you must complete the required period of practical training set out in the Veterinary Nurse Registration Rules that are laid down by the RCVS as a professional regulatory body.

If you are a vocational student, you will need to complete the Level 3 Diploma in Veterinary Nursing.

In addition to your qualifying awards, the RCVS Veterinary Nurse Registration Rules require that you must also undertake a minimum period of training as follows:

- Overall period of training. This must be a minimum of 2,990 hours excluding annual leave or absence and includes all elements of your training ie your educational programme and practical training.
- Practical training. The overall period of training must include a minimum period of 1,800 hours of employment or educational placement in an approved training practice.

You may complete your training on a part time basis however you will need to complete the part time equivalent of the above periods

A full-time week is deemed to be 35 hours or more. The hours must be your contracted (or programmed) hours; you cannot count overtime or on-call hours.

You must keep an accurate record of your training (see below) as this will be needed when you come to register as a qualified veterinary nurse.

Enrolment

As a student veterinary nurse you are enrolled, via your approved Centre, by City & Guilds with the RCVS for a period of up to six years. Your enrolment with the RCVS serves two important purposes:

- Your enrolment with the RCVS serves as a record of your legal status as a student veterinary nurse and gives you dispensation to undertake aspects of nursing care and animal treatment, under supervision that are covered by Schedule 3 of the Veterinary Surgeons Act 1966.

Record of training

You must ensure that your Record of Training form is correctly completed according to the instructions and is kept up-to-date at all times. It must be accurately dated and signed by your training practice principal.

It is especially important to ensure that your card is up-to-date and signed before you leave a training practice. It may be difficult to obtain signatures in retrospect if you fail to do this. The RCVS will need your Record of Training in order to enter you on the Register of Veterinary Nurses once you have completed your training. You should note that the RCVS routinely audits and verifies signatures on records of training.

Moving to another training practice

RCVS Centres approve affiliated training practices to support veterinary nursing learners. They therefore must agree the enrolment of new students and the acceptance by a training practice of any student moving from another practice and/or Centre part-way through training.

You must inform both your Centre and the RCVS before you move to another practice during your training. Such a move may mean that you have to transfer to another Centre. If you fail to make arrangements for this before you change your employer, you may seriously disrupt, or even curtail, your training. The offer of employment by a training practice is no guarantee that you may continue with your qualification. A form to notify your intended change of training practice can be found in section 6.

If you wish to move to another TP affiliated to your current Centre, you must still notify the Head of Centre and obtain his/her agreement to your move.

Schedule 3 of the Veterinary Surgeons Act 1966

You must always ensure that the veterinary staff you work with know that you are a student. This is especially important if you work with locum staff who may not know you very well, or you go to work in a different branch of your practice. In this way you will be better supported as a student veterinary nurse and are less likely to find yourself being asked to undertake work that is beyond your competence. You must always introduce yourself clearly to clients so that they know you are a student. Be careful not to mislead clients into thinking that you are a registered veterinary nurse.

As an enrolled student veterinary nurse you must always work under the supervision of qualified veterinary staff who must be veterinary surgeons or registered veterinary nurses. You may provide nursing care for animals under the direction of the veterinary surgeon in charge of the case and under the supervision of other qualified members of the veterinary team.

You also may provide medical treatments (such as administering medicines) and undertake minor surgical procedures (such as the suturing of a minor wound) for animals. This is a special

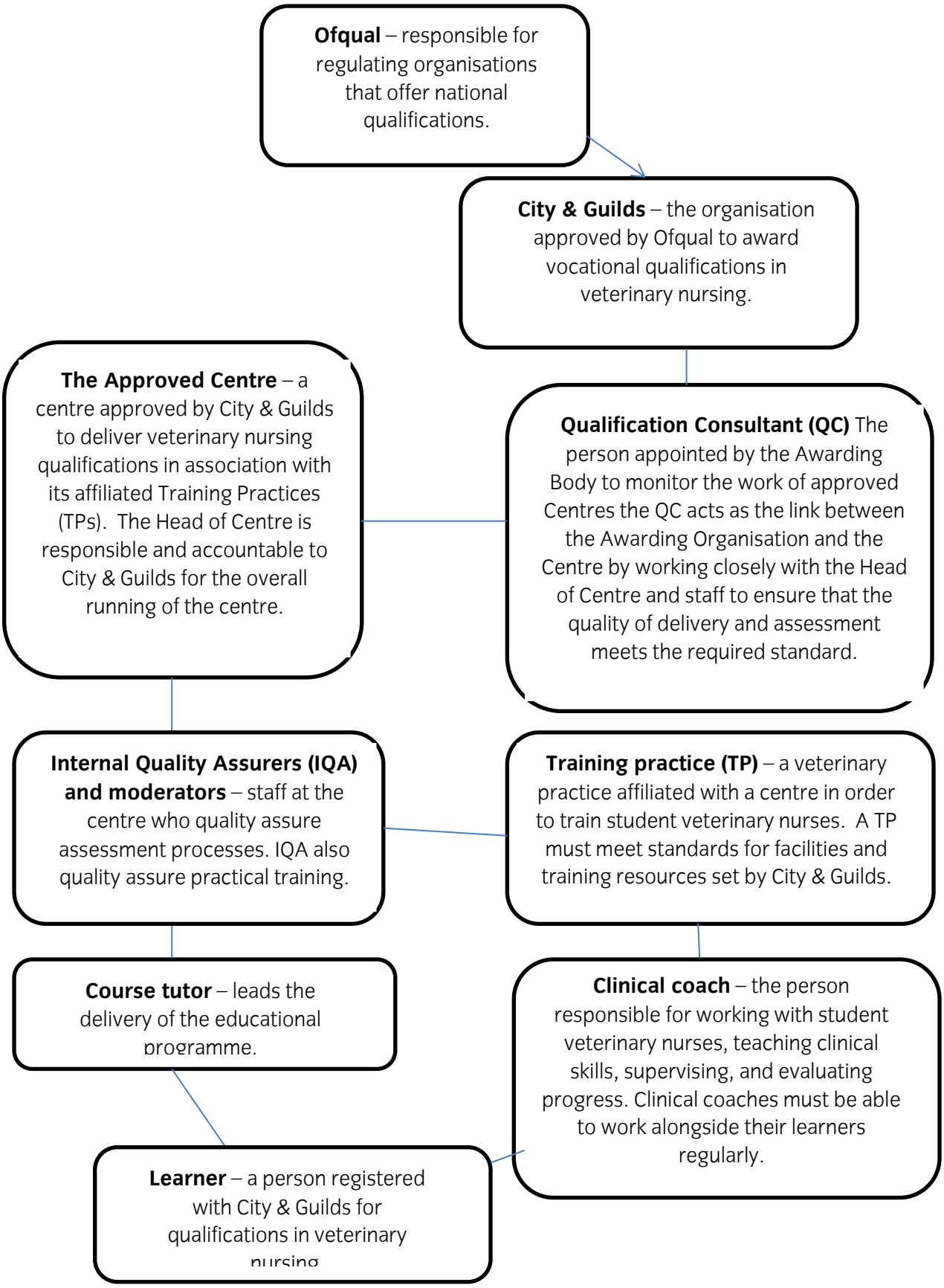
dispensation afforded veterinary nurses under Schedule 3 of the Veterinary Surgeons Act 1966 and is commonly known as “Schedule 3 work”. As a student veterinary nurse, you must always ensure that you are supervised by a veterinary surgeon or a registered ~~or~~ veterinary nurse when undertaking such work.

You may only undertake Schedule 3 work in your training practice. You must not undertake Schedule 3 work if working at a practice that is not a TP.

If you cease to be a student veterinary nurse, either because you leave training or because you have completed training but have not registered on the RCVS Register of veterinary nurses, you will lose your legal entitlement to undertake Schedule 3 work, even though you may be competent to do so.

The RCVS will suspend your enrolled status if it becomes evident that you are no longer actively working towards qualification.

Who's who in City & Guilds Veterinary Nursing qualifications



2 Training in clinical practice

About your practical training

This section will help you prepare for time learning in clinical veterinary practice. During this time you will be working towards practical competence as a veterinary nurse.

Over the course of your qualification you will be required to demonstrate your competence in a series of "day one" clinical skills that are expected of all qualified nurses when they join the RCVS register. These skills are based on the Veterinary Nursing Day One Competences and are set out in the Topics of the Diploma units.

As you progress through your practical training, you will be expected to complete an electronic **RCVS Day One Skills for Veterinary Nursing**, which will log your competence within the required clinical skills.

Your practical training progress and RCVS Day One Skills for Veterinary Nursing will be supervised by a **Clinical Coach**. More details about his/her role are set out in the table below. It is very important that your clinical coach regularly spends time with you that is focused on your practical learning. The RCVS stipulates that a minimum of three hours per week must be spent actively engaging in training activities. Examples of such activity are:

- Demonstrating practical skills
- Supervising new skills
- Case discussions
- Evaluating progress and planning experience.

People involved in your practical training

The following table sets out the role of everyone involved in your practical training – including you.

You, the learner	• **You will be enrolled as a student veterinary nurse with the RCVS, through your centre or university and be worked in an approved training practice (TP) or auxiliary training practice (aTP)[1] either as an employee or during educational placement** • **You will have your own unique enrolment number and enrolment date** • **As you work in your TP and gain experience, you will complete your RCVS Day One Skills for Veterinary Nursing which will demonstrate your competence in the necessary clinical skills**

[1] Both training practices and auxiliary training practices will be referred to as TPs throughout unless there is a specific reason to distinguish them

Your clinical coach	• Your clinical coach is either an experienced registered veterinary nurse (RVN) or veterinary surgeon (MRCVS), who has received suitable training from your centre. Your clinical coach will ensure that you are supported and guided appropriately in order to gain experience and achieve competence in the clinical skills contained within the RCVS Day One Skills for Veterinary Nursing • You will be allocated one clinical coach within your TP who will work alongside you and will co-ordinate other members of the practice team who contribute to your practical training • Your clinical coach will introduce you to the requirements of both the qualification and to your TP. He/she will help you plan how to achieve the practical aspects of your qualification through tutorials, skills matching, coaching, guiding and supporting you throughout the duration of your practical training. Your clinical coach will also supervise completion of your RCVS Day One Skills for Veterinary Nursing • Your clinical coach may, from time to time, allocate you an expert witness within your TP to provide tuition, support and guidance within specific areas of your practical training
Expert witnesses in your TP	• An expert witness is an experienced person within your TP who can contribute significantly to your practical training in their specific area of expertise e.g. reception duties, nursing clinic • An expert witness will provide you with guidance, support and training in a given skill or set of skills. However, it is your allocated clinical coach who is responsible for agreeing competency and signing off the RCVS Day One Skills for Veterinary Nursing
Your clinical tutor	• Your clinical tutor is an experienced member of the teaching team employed by the centre delivering your qualification • Tutors are either registered veterinary nurses or veterinary surgeons who have received suitable training from your centre in order to contribute to your practical training • Your clinical tutor may, from time to time, sign off practical competencies within your RCVS Day One Skills for Veterinary Nursing that you have achieved during course delivery at college
Your verifier	• Your verifier is a member of the centre team experienced in quality assurance processes • Your verifier will periodically sample your RCVS Day One Skills for Veterinary Nursing to check on your progress and achievement to ensure that you are receiving the coaching and support required to enable you to progress through your qualification • As part of the quality assurance processes, on completion of a full RCVS Day One Skills for Veterinary Nursing unit, the verifier may observe your practical skills themselves which will provide useful feedback to your clinical coach on the competencies you have achieved. This may be done either in the TP or at college.
Your external quality assurer	• City & Guilds External Quality Assurers will visit your Centre on an annual basis. Part of these Quality Assurance visits will include sampling of the RCVS Day One Skills for Veterinary Nursing on a risk based approach. This will include checks to ensure the Quality Assurance process is being completed and monitored.

Working with the RCVS Day One Skills for Veterinary Nursing

When you enrolled with the RCVS, you will have received login details from the centre allowing access to the electronic RCVS Day One Skills for Veterinary Nursing. This log will enable you to evidence your procession with and competence in the required clinical skills.

For information on using the electronic RCVS Day One Skills for Veterinary Nursing, please contact the RCVS or refer to their website www.rcvs.org.uk

3 Courses, assessment and certification

OSCE examination arrangements

The Level 3 Diploma in Small Animal Veterinary Nursing OSCE is the final examination for the qualification. This means that learners must pass this assessment in order to gain the Diploma in addition to achieving all of the mandatory units.

The OSCE consists of 12 stations, each one 6 minutes long. Learners are required to pass a **minimum** of 8 stations. Within each station are a number of key steps. Learners must achieve these critical steps in order to pass the station. It is the Centres responsibility to ensure Learners are adequately prepared for the examination and familiar with the critical steps.

To be eligible to enter the OSCE examination, you must:

- be registered for the Level 3 Diploma in Veterinary Nursing
- have completed the RCVS Day One Skills for Veterinary Nursing and have it agreed as complete by your Centre's Internal Quality Assurer
- have achieved all City & Guilds unit examinations.

Attending examinations

You must ensure that you plan your journey to the examination centre allowing additional time for unforeseen delays. It is recommended that you plan to arrive at least 30 minutes prior to your reporting time and that you allow time for parking if arriving by car. If you are delayed you should inform the centre as soon as possible. For this reason it is essential that you have your detailed instructions and contact details for the centre with you.

If you are unavoidably delayed, we will make every effort to enable you to take your examination. However this may be on another day and/or at another examination centre depending on the appointments available and, depending on the circumstances, you may be asked to pay an additional fee.

You should attend your OSCE examination in uniform. This should be clean and neat; your hair and personal presentation should reflect the requirement for good hygiene along with other health and safety considerations in clinical practice. Examiners may refuse admission to Learners who are unsuitably dressed for clinical work. You will be required to wear an apron for the laboratory section. These will be provided for you. Jewellery should not be worn.

You must take photographic identification e.g. driving license to the exam with you.

Your mobile telephone must be switched off and left outside the examination room along with your bag and outdoor clothing. The examination invigilators will ensure that these items are safely stored whilst you are being examined.

Calculators will be provided for OSCE stations where necessary.

If you wish to take a bottle of water into the exam room with you, it must be a sports cap bottle to avoid spillages and the label must be removed.

Small, medium and large latex powder-free gloves are provided for the stations that require gloves. If you cannot use these gloves for any reason you must ask your centre to ask City & Guilds' permission at point of entry if they can provide your own.

Resitting an examination

You are permitted a maximum of four attempts at each examination. If you need to re-sit an examination for the fourth time, you must apply to your Centre for permission to do so. Before you are allowed to enter on a fourth occasion, you will be asked to demonstrate that you are undertaking a programme of revision and re-training as deemed suitable by your centre. This measure is in place to ensure that you are adequately prepared to re-sit the examination on a fourth and final occasion.

Should you fail an examination on four occasions, the RCVS must be notified and your award registration and enrolment as a student veterinary nurse will be terminated. However, you may re-register for the qualification, normally after a minimum period of 6 months. The RCVS must be notified when you re-register. In order to do this you must satisfy your Centre that you have made tangible efforts to address your learning needs since your first enrolment, and are therefore in a substantially better position to achieve the qualification.

Certification

You will be eligible to receive your qualification certificate as soon as you have been satisfactorily assessed in all units.

You should note that the time taken from receiving your final assessment result to the arrival of your certificate includes your Centre's processes as well as those of the Awarding Body and may take up to eight weeks.

4 Entry to the RCVS Register of Veterinary Nurses

Qualifying to enter the Register

You may apply to enter the RCVS Register of Veterinary Nurses once you have achieved a qualifying award ie:

- achieved your Level 3 in Diploma in Veterinary Nursing

You must also have completed the period of training stipulated in the RCVS Veterinary Nurse Registration Rules as follows:

- the total length of your training, including your college course, must be at least 2990 hours
- this period must include a minimum of 1800 hours of employment or educational placement in a training practice (TP).

If you have undertaken part-time training, you must complete the equivalent of this time.

Time spent in practice must be based on your contracted hours, or the hours timetabled by your university or college as practice placement. You may not include overtime, on-call hours.

The RCVS will require your completed Record of Training form (see section 7) in order to permit you entry onto the Register of Veterinary Nurses. Ensure that you keep this record up-to-date throughout your training and that it contains the correct signatures. The RCVS audits records of training, which includes the verification of signatures.

The RCVS will remove you from the database of student veterinary nurses once you have completed your qualifying awards (either vocational or higher education) and have completed the required period of training. This means that, unless you enter the Register of Veterinary Nurses, you will no longer be entitled to undertake Schedule 3 work.

Ceasing to be a student veterinary nurse

As a student veterinary nurse you have a dispensation, under Schedule 3 of the Veterinary Surgeons Act, to undertake certain acts of veterinary surgery under supervision in order to further your training. Once you have qualified to enter the Register of Veterinary Nurses you no longer require this dispensation and the RCVS will accordingly remove you from the database of student veterinary nurses.

If you do not apply to register when you have qualified to do so, the RCVS will notify you, and your last known employer (if applicable), that you are about to be removed from the student database and will no longer be in a position to undertake Schedule 3 work under supervision. This normally occurs if you do not register within three months of qualifying to do so.

If you have not completed your mandatory period of practical training by the time you have achieved your level 3 vocational award, please contact the RCVS. If this is the case we will maintain (or extend) your student enrolment in order that you may complete your qualifying hours.

Former student nurses who do not enter the Register within five years of qualification will be required to undertake a Period of Supervised Practice in accordance with the RCVS Veterinary Nurse Registration Rules should they subsequently wish to become registered.

Working as a registered veterinary nurse

Once you have been registered on the RCVS List of Veterinary Nurses, you may:

- undertake delegated acts of veterinary surgery under veterinary direction according to the provisions of Schedule 3 of the Veterinary Surgeons Act 1966
- supervise the work of student veterinary nurses.

You must abide by the RCVS Guide to Professional Conduct for Veterinary Nurses and ensure that you keep up-to- date with any changes to the Guide.

You will be required to pay an annual retention fee to maintain your veterinary nurse registration. At the time of writing, the due date for the veterinary nursing annual retention fee is 1 November each year.

Once registered, you may use the post-nominal letters RVN (registered veterinary nurse).

5 Guidance on Schedule 3 of the Veterinary Surgeons Act 1966

Veterinary nurses and the Veterinary Surgeons Act 1966

Introduction

1. Under the Veterinary Surgeons Act 1966 the general rule is that only a veterinary surgeon may practise veterinary surgery. There are, however, a number of exceptions to this rule, and two of them concern veterinary nurses. This note explains the law as it applies to them.

Definition of veterinary surgery

2. Veterinary surgery as defined in the Act "means the art and science of veterinary surgery and medicine and, without prejudice to the generality of the foregoing, shall be taken to include-
   (a) the diagnosis of diseases in, and injuries to, animals including tests performed on animals for diagnostic purposes;
   (b) the giving of advice based upon such diagnosis;
   (c) the medical or surgical treatment of animals; and
   (d) the performance of surgical operations on animals."

What can be done by people other than veterinary surgeons

3. Schedule 3 to the Act allows anyone to give first aid in an emergency for the purpose of saving life and relieving suffering. The owner of an animal, or a member of the owner's household or employee of the owner, may also give it minor medical treatment. There are a number of other exceptions to the general rule, mainly relating to farm animals, in addition to the exceptions, which apply to veterinary nurses. These are explained below.

What can be done by veterinary nurses

4. Veterinary nurses, like anyone else, may give first aid and look after animals in ways, which do not involve acts of veterinary surgery. In addition, veterinary nurses may do the things specified in paragraphs 6 and 7 of Schedule 3 to the Veterinary Surgeons Act 1966 as amended by the Veterinary Surgeons Act 1966 (Schedule 3 Amendment) Order 2002. The text of these paragraphs is set out below.

Registered veterinary nurses

5. Paragraph 6 applies to registered veterinary nurses. They may administer "any medical treatment or any minor surgery (not involving entry into a body cavity)" under veterinary direction.

6. The animal must be under the care of a veterinary surgeon and the treatment must be carried out at his or her direction. The veterinary surgeon must be the employer of the veterinary nurse or be acting on behalf of the nurse's employer.

7. The directing veterinary surgeon must be satisfied that the veterinary nurse is qualified to carry out the treatment or surgery. RCVS will advise from time to time on veterinary nursing qualifications, which veterinary surgeons should recognise.

8. The RCVS Register of Veterinary Nurses, commenced in 2007, is a register within which registrants have agreed to abide by the Guide to Professional Conduct for Veterinary Nurses and thus be professionally accountable.

9. All registered veterinary nurses (RVNs) are qualified to administer medical treatment or minor surgery (not involving entry into a body cavity), under veterinary direction, to all the species which are commonly kept as companion animals, including exotic species so kept. Unless they hold further qualifications they are not qualified to treat the equine species, wild animals or farm animals. Registered veterinary nurses who hold the RCVS Certificate in Equine Veterinary Nursing (ERVNs) are qualified to administer medical treatment or minor surgery (not involving entry into a body cavity), under veterinary direction, to any of the equine species - horses, asses and zebras.

10. A registered veterinary nurse should only carry out a particular act of veterinary surgery if she or he is competent to do so and has the necessary experience to deal with any problems, which may arise. Where appropriate, a veterinary surgeon should be available to respond to a request for help. A registered veterinary nurse may only carry out acts of veterinary surgery under the direction of a veterinary surgeon, who is accountable for what is done and should ensure that it is covered by professional indemnity insurance.

Student veterinary nurses

11. Paragraph 7 of the Schedule applies to student veterinary nurses. A student veterinary nurse is someone enrolled for the purpose of training as a veterinary nurse at an approved veterinary nursing centre (Centre) or a veterinary practice approved by such a centre (TP). This does not include those who are undertaking the Animal Nursing Auxiliary or Veterinary Care Assistant qualifications, or any other animal-related or in-house training.

12. A student veterinary nurse may administer "any medical treatment or any minor surgery (not involving entry into a body cavity)" under veterinary direction.

13. The animal must be under the care of a veterinary surgeon and the treatment must be carried out at his or her direction. The veterinary surgeon must be the employer of the veterinary nurse or be acting on behalf of the nurse's employer.

14. The treatment or minor surgery must be carried out in the course of the student veterinary nurse's training. In the view of the RCVS, such work should be undertaken only for the purpose of learning and consolidating new skills.

15. The treatment or surgery must be supervised by a veterinary surgeon or a Registered veterinary nurse. In the case of surgery the supervision must be direct, continuous and personal.

16. In the view of RCVS, a veterinary surgeon or Registered veterinary nurse can only be said to be supervising if they are present on the premises and able to respond to a request for assistance if needed. "Direct, continuous and personal" supervision requires the supervisor

to be present and giving the student nurse his or her undivided personal attention. These definitions are set out in the RCVS Guide to Professional Conduct.

What is a medical treatment or minor surgical procedure?

17. The RCVS is often asked to provide a definitive list of procedures that can legally be delegated under Schedule 3. The medical treatment or minor surgery allowed by Schedule 3 includes anything that requires a veterinary diagnosis and intervention. It would be almost impossible to list all procedures allowed, because the delegation of veterinary procedures, even minor medical procedures, will involve consideration of all the circumstances, not just the procedure itself. However, broad guidance on what is allowed, and specific advice, can be sought from the RCVS.

18. The Act does not provide a list of minor surgery and medical treatment that can be delegated. As stated above, this is because it would be impossible to say with any certainty that a given procedure would, in every event, be safe to delegate. Whilst Schedule 3 does not provide a definitive list of permitted delegations, three key factors ought to be considered by the delegating veterinary surgeon:

- The nature of the procedure (or treatment) ie its level of complexity
- The individual animal concerned ie species, condition, likelihood of complications, owner's wishes
- The qualifications of the person being delegated to ie Registered veterinary nurse or enrolled student veterinary nurse (or in the case of a minor treatment, a lay person) specific training, experience, confidence, willingness to accept delegation and the availability of someone more qualified to step in if needed

19. Should a delegation decision become the subject of litigation, or a professional conduct complaint, a court (or an RCVS disciplinary panel) would consider the 'reasonableness' of the veterinary surgeon's actions. A clearly reasoned decision, taken having followed a logical and well-documented process, should therefore be behind every delegation of a veterinary treatment or procedure to a non-veterinary surgeon.

What can a student veterinary nurse do?

20. Student veterinary nurses are included in the legislation because they need to learn, and become competent in, clinical skills. The Act recognises this and therefore stipulates that they must work under the supervision of a veterinary surgeon Registered veterinary nurse. Once again, the RCVS Guide to Professional Conduct states what is meant by 'supervision'. Provided that they are properly supervised, student veterinary nurses can, in the course of their training, do anything that may be delegated to a Registered veterinary nurse, i.e. they may undertake delegated treatments in order to learn.

21. Where a student veterinary nurse has reservations about undertaking a delegated procedure he/she must discuss this with either the delegating veterinary surgeon or a qualified colleague. Reservations might, for example, include doubts about his/her own competence, the degree of supervision/assistance available, the complexity of the procedure or the condition of the animal.

6 Notification of student changes of address, employment and/or request to transfer centre

If your address, training practice is changing or you are transferring to a different centre, please contact your centre and the RCVS for the appropriate documentation to complete.

Failure to notify the RCVS of a change of Centre or Training Practice may compromise your qualification.

7 Record of Veterinary Nurse Training

A record of a student's time spent in veterinary nurse training must be kept. Please contact the RCVS for the records that must be completed.

Training must take place over a period of:

Total training time (minimum): 2990 hours

Time spent in clinical practice (minimum): 1800 hours

or the part-time equivalent of the above as set out in the RCVS Veterinary Nursing Registration Rules. This period **excludes** annual leave and absence.

This record must be kept up-to-date by the student and countersigned by:

- The Principal of the veterinary practice where the student is employed or on placement and
- The Head of Centre

It must be signed:

- When the student leaves employment or placement at a training and assessment practice (TP). and
- When the student completes attendance of a course in support of a vocational of higher education award

The signatory should ensure that the dates of commencement and termination are correctly entered. Periods of annual leave and absence must be deducted from the total number of full weeks spent in each placement or employment.

Changes of address and of employment must be notified in writing by the student to the RCVS and to their Centre. (see section 6)

This Record of Training is the property of the Royal College of Veterinary Surgeons, Belgravia House, 62 – 64 Horseferry Road, London SW1 2AF. It must be kept up to date by the student and be produced to the RCVS on request. Signatures are routinely checked and audited.

8 Skills match grid

Candidate name		**Enrolment number**						
		How often do I do this activity?			**How strong are my skills in this activity?**			**Ready for assessment Y/N**
		Often	Sometimes	Never	Strong	Fair	Weak	
Unit title								
360	Understand the operational requirements of a veterinary practice							
361	Applied anatomy and physiology for small animal veterinary nursing practice							
362	Professional relationships and communication for veterinary nursing practice							
363	Applied animal welfare, health and husbandry for veterinary nurses							
364	Infection control in veterinary practice							
365	Essentials of practical veterinary nursing care for hospitalised animals							
366	Supporting the supply of veterinary medicines							
367	Veterinary nursing support of diagnostic imaging							
368	Veterinary nursing support of laboratory diagnostics							
369	Veterinary operating theatre practice							
370	Understand the essentials of veterinary nursing care for hospitalised animals							
371	Principles of supporting veterinary anaesthesia							
372	Preparing for professional registration							

373	Principles of Veterinary nursing support for small animals							
374	Principles of peri-operative veterinary nursing support for small animals							
375	Principles of small animal veterinary nursing emergency and critical care							
376	Practical monitoring of small animal veterinary anaesthesia							
377	Practical peri-operative veterinary nursing support for small animals							
378	Practical veterinary nursing support for small animals							

Skills match start plan for training and development	Target dates for review	Comment and reflection	Date
Learner signature		Date	
Clinical coach signature		Date	

Skills match start plan for training and development	Target dates for review	Comment and reflection	Date

Learner signature		Date	
Clinical coach signature		Date	

Appendix 3 Reading List

- BSAVA Textbook of Veterinary Nursing - 5th Edition Edited by B Cooper, E Mullineaux, L Turner ISBN 9781905319268
- The Complete Textbook of Veterinary Nursing – 2nd Edition Victoria Aspinall ISBN 9780702053672BSAVA Manual of Practical Veterinary Nursing – Elizabeth Mullineaux & M Jones ISBN 9780905214917
- BSAVA Manual of Small Animal Anaesthesia and Analgesia – 2nd Edition Edited by C Seymour, R Gleed ISBN 978-0905214481
- Equine Veterinary Nursing Manual –2nd Edition K Coumbe ISBN 978040656556
- A-Z Handbook for Veterinary Nursing – A Lomas, A Magee & C Wilson ISBN 1904627994
- Anaesthesia for Veterinary Nurses – L Welsh ISBN 9781405186735
- Ethics, Law and the Veterinary Nurse- S Pullen & C Gray ISBN 9780750688444
- Introduction to Veterinary Anatomy and Physiology Textbook – 2nd Edition V Aspinall & M Cappello ISBN 9780702029387
- Introduction to Veterinary Anatomy and Physiology Revision Aid – S Bowden ISBN 97807029370
- Veterinary Pharmacology- A Practical Guide- A Rock ISBN 0750688628
- Clinical Procedures in Veterinary Nursing – 2nd Edition V Aspinall ISBN 9780080452661
- Dictionary of Veterinary Nursing –DR Lane, S Guthrie & S Griffith ISBN 9780080452654
- Calculations for Veterinary Nurses –M Moore & N Palmer ISBN 978063205498
- Veterinary Practice Management – A Practical Guide – 2nd Edition M Shilcock & G Stuchfield ISBN 9780702029202
- Small Animal Nutrition –S Agar ISBN 075064575-x

This list is not exhaustive and provided as a minimum requirement that centres can refer to. It is the responsibility of the centre to ensure they keep up to date with revised versions.

Appendix 4 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on www.cityandguilds.com.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of learners
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for learners who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Events**: dates and information on the latest Centre events
- **Online assessment**: how to register for e-assessments.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of learners
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

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www.cityandguilds.com

Useful contacts

UK learners **General qualification information**	**T: +44 (0)844 543 0033** **E: learnersupport@cityandguilds.com**
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: **intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: **singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **walledgarden@cityandguilds.com**
Employer	T: +44 (0)121 503 8993 E: **business@cityandguilds.com**

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City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Land Based Services (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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