

RCVS AWARDING BODY



Quality awards for veterinary nursing

# Qualification Handbook and RCVS Professional Syllabus



**Level 3 Diploma in Veterinary Nursing  
and  
Level 3 Certificate in Animal Nursing Studies**



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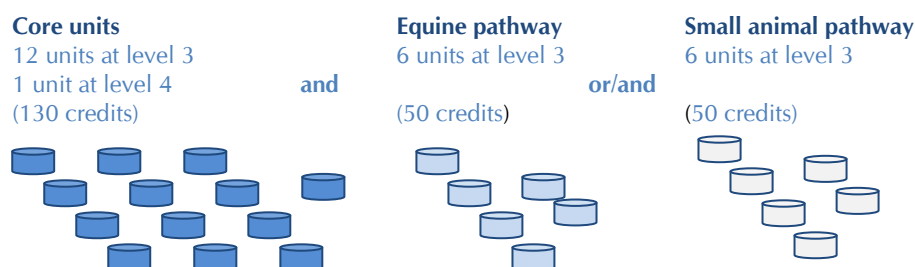
## SECTION 1 QUALIFICATION OVERVIEW

### PURPOSE

- 1.1. The Level 3 Diploma in Veterinary Nursing qualification is designed to support the preparation of veterinary nurses for professional registration on the Royal College of Veterinary Surgeons Register of Veterinary Nurses.
- 1.2. It is mandatory for those seeking entry to the RCVS Register to be in possession of an “approved qualification”. The level 3 Diploma in Veterinary Nursing falls into this category.
- 1.3. The primary functions of the qualification are to:
  - facilitate candidates to gain the veterinary nursing knowledge and skills requisite for safe and effective practice
  - and
  - develop in them skills of enquiry and reflection that are essential to lifelong professional learning and development.
- 1.4. The supporting taught programme should include a balance of teaching and learning strategies, designed to help candidates develop knowledge, understanding and effective clinical skills.
- 1.5. Employment (as apprentices) or clinical placement in suitable veterinary training practices will foster the acquisition of “day one” clinical skills and the development of competence and confidence in preparation for the responsibilities of professional registration and practice.

### QUALIFICATION STRUCTURE

- 1.6. The Level 3 Diploma in Veterinary Nursing comprises a core and two option pathways as follows:



- 1.7. These are the units:

Core units					
Related NOS Unit number	SSC	Unit number	Unit Title	Level	Credits
RVN2	Lantra	VN1	Understanding the operational requirements of a veterinary practice	3	10
A4	Lantra	VN2	Professional relationships and communication for veterinary nursing practice	3	10
	Lantra	VN3	Comparative functional anatomy for veterinary nursing practice	3	20
RVN5	Lantra	VN4	Applied animal welfare, health and husbandry for veterinary nurses	3	20
RVN3	Lantra	VN5	Infection control in veterinary practice	3	5
RVN6, RVN7, RVN9	Lantra	VN6	Understanding the essentials of veterinary nursing care for hospitalised animals	3	10
RVN6, RVN7, RVN9	Lantra	VN7	Essentials of practical veterinary nursing care for hospitalised animals	3	5
RVN29, RVN30	Lantra	VN8	Supporting the supply of veterinary medicines	3	5

RVN18, RVN19, RVN20	Lantra	VN9	Veterinary nursing support of diagnostic imaging	3	10
RVN12, RVN13, RVN14	Lantra	VN10	Veterinary nursing support of laboratory diagnostics	3	5
RVN21, RVN2, RVN23, RVN24	Lantra	VN11	Supporting veterinary operating theatre practice	3	10
RVN25, RVN26, RVN27	Lantra	VN12	Principles of supporting veterinary anaesthesia	3	10
RVN31	Lantra	VN19	Preparing for professional registration	4	10

Small animal option pathway					
RVN25, RVN26, RVN27	Lantra	SAVN13	Practical monitoring of small animal veterinary anaesthesia	3	10
RVN11, RVN15, RVN28	Lantra	SAVN14	Principles of peri-operative veterinary nursing support for small animals	3	10
RVN11, RVN15, RVN28	Lantra	SAVN15	Practical peri-operative veterinary nursing support for small animals	3	5
RVN15	Lantra	SAVN16	Principles of veterinary nursing support for small animal patients	3	10
RVN15	Lantra	SAVN17	Practical veterinary nursing support of small animal patients	3	5
RVN17	Lantra	SAVN18	Principles of small animal veterinary nursing emergency and critical care	3	10

Equine option pathway					
RVN11, RVN15, RVN28	Lantra	EQVN20	Principles of peri-operative veterinary nursing support for horses	3	10
RVN11, RVN15, RVN28	Lantra	EQVN21	Practical peri-operative veterinary nursing support for horses	3	5
RVN15	Lantra	EQVN22	Principles of veterinary nursing support for equine patients	3	10
RVN15	Lantra	EQVN23	Practical veterinary nursing support of equine patients	3	5
RVN17	Lantra	EQVN24	Principles of equine veterinary nursing emergency and critical care	3	10
RVN15	Lantra	EQVN25	Principles of equine neonatal care	3	10

- 1.8. All core units are mandatory. Candidates will elect to undertake either the small animal or equine pathway; all units are mandatory within each pathway. Candidates will achieve a minimum of 180 credits overall.

### Certificate in Animal Nursing Studies

- 1.9. The level 3 Certificate in Animal Nursing Studies is available as a “step off” qualification for candidates who leave the Diploma programme early or who otherwise fail to complete the diploma award. In order to achieve the Certificate a minimum of 35 credits must be achieved as follows:

Mandatory units					
Related NOS Unit number	SSC	Unit number	Unit Title	Level	Credits
RVN2	Lantra	VN1	Understanding the operational requirements of a veterinary practice	3	10
RVN6, RVN7, RVN9	Lantra	VN6	Understanding the essentials of veterinary nursing care for hospitalised animals	3	10
RVN6, RVN7, RVN9	Lantra	VN7	Essentials of practical veterinary nursing care for hospitalised animals	3	5

<b>Optional units</b>					
A minimum of <b>ten credits</b> from the following:					
Related NOS Unit number	SSC	Unit number	Unit Title	Level	Credits
A4	Lantra	VN2	Professional relationships and communication for veterinary nursing practice	3	10
RVN3	Lantra	VN5	Infection control in veterinary practice	3	5
RVN29, RVN30	Lantra	VN8	Supporting the supply of veterinary medicines	3	5
RVN5	Lantra	VN4	Applied animal welfare, health and husbandry for veterinary nurses	3	20

#### **MODES OF DELIVERY**

- 1.10. Qualifications may be delivered full or part-time. Delivery may be attended or via blended learning. They are not suitable for delivery by distance learning alone.
- 1.11. Core units must be delivered in the contexts of small animal nursing, that is to say cats, dogs and \*exotics, and equine nursing. Candidates may gain relevant practical experience in either context, or in both, during their employment or placement.
- 1.12. Practical, work-based learning comprises a critical element of this qualification. Veterinary practices that support candidates will accordingly be evaluated and subject to ongoing quality assurance by centres to ensure that they have in place the requisite standard of facilities, case-load and staff expertise to support clinical learning.

*\* exotics are small pets other than cats and dogs, and may include: birds, rabbits, reptiles, rodents and small mammals*

#### **ENTRY REQUIREMENTS**

- 1.13. Candidates must be in possession of a minimum of five GCSE or Standard grade passes at grade C or above in:-
- English language
  - Mathematics
  - A science subject
  - Two further subjects
- or equivalent qualifications at level two or higher.
- 1.14. This qualification requires candidates 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.
- 1.15. Access to this qualification is available to all candidates who meet the entry requirements, regardless of gender, race, creed, age or special needs. The Head of Centre should ensure that no candidate is subjected to unfair discrimination on any grounds in relation to access to the taught programme or assessment. Centres are required to check whether equal opportunities policies are being adhered to.
- 1.16. Candidates must, with reasonable adjustments, be able to undertake the full range of competencies required to achieve this qualification (as defined in the Veterinary Nursing Occupational Standards)

#### **PROGRESSION**

- 1.17. The RCVS Level 3 Diploma in Veterinary Nursing is designed to foster skills for lifelong learning and may therefore provide the basis for progression into a range of higher level qualifications, such as post-professional registration degree programmes or the RCVS post-qualification Diploma in Advanced Veterinary Nursing framework.

## RECOGNITION OF PRIOR LEARNING (RPL)

- 1.18. Candidates may be credited with any unit of the award 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, candidates must be asked to provide evidence of currency. A unit achieved more than ten years prior to registration will not be accepted for RPL.
- 1.19. The Awarding Body may accept evidence of recent\* and relevant alternative qualification and clinical experience that demonstrably meets the learning outcomes of any unit. Credit is not awarded for units exempted by reason of RPL.
- \*achieved within the five years preceding award registration*
- 1.20. Candidates who have achieved a level 2 NVQ in Veterinary Nursing and a Level 2 Certificate in Veterinary Nursing Theory within the five years preceding registration for this qualification will be exempt from core units VN1 to VN7 inclusive. Candidates holding these qualifications gained more than five years prior to registration must be asked to provide evidence of currency. A qualification achieved more than ten years prior to registration will not be accepted for RPL.

## SUPPORTING PROGRAMME DELIVERY

- 1.21. Candidates must have access to a taught programme in support of the qualification outcomes. This may be provided via an attended course, or through a programme of blended learning, delivered by an RCVS-approved centre.
- 1.22. A taught Diploma programme must have a minimum duration of twenty two weeks (715 guided learning hours). In addition, candidates are expected to undertake a minimum of 1185 hours of independent study, to include supervised work experience in clinical veterinary practice.
- 1.23. A taught programme for the Certificate in Animal Nursing Studies must address the guided learning hours indicated within the core and selected option units.
- 1.24. Course tutors should familiarise themselves with the qualification units and structure before designing a supporting course curriculum. Providing that the learning outcomes of the qualification are addressed and appropriately assessed, centres may deliver the award in ways that best address the needs of their candidates.
- 1.25. Practical, work-based learning outcomes are integrated throughout the qualifications, either in dedicated skills-based units or as outcomes integrated with knowledge and understanding. Practical learning must be supported both by skills teaching within taught programmes and via teaching and supervised experience in clinical veterinary practice. Centres are accordingly required to have in place suitable facilities for the teaching of clinical skills.

## ASSESSMENT AND ASSESSMENT STRATEGY

### Level 3 Diploma in Veterinary Nursing

- 1.26. The Diploma qualification leads to professional registration and a licence to practise. It is a requirement of the Royal College of Veterinary Surgeons Regulatory Bye-laws that such qualifications be subject to independent assessment and examination.

The qualification will accordingly be assessed using a variety of methods:-

#### Unit level assessment

Knowledge and understanding:

- Independently assessed assignments
- Independently assessed examinations
- RCVS external examinations

Skills:

- Work-based progress log (clinical skills)

#### Qualification level assessment

- RCVS OSCE examination of essential clinical skills

This assessment must be passed, in addition to the achievement of credit, in order to achieve the full level 3 diploma qualification

1.27. The following table indicates the spread of assessment methodologies:-

### LEVEL 3 DIPLOMA IN VETERINARY NURSING MATRIX OF UNIT AND QUALIFICATION ASSESSMENTS

#### Core units – all to be achieved by all candidates

QCF No	RCVS No	Title	credits level		Unit level assessment (conducted by centre)		Qualification summative assessment (conducted by RCVS)
					Assessment of K & U	Assessment of skills	Assessment of skills
M/601/6871	VN1	Understanding the operational requirements of a veterinary practice	3	10	RCVS external examination	Work-based progress log	RCVS Qualification assessment OSCE
J/601/7170	VN4	Applied animal welfare, health and husbandry for veterinary nurses	3	20	RCVS external examination	Work-based progress log	
L/601/7171	VN5	Infection control in veterinary practice	3	5	RCVS external examination	Work-based progress log	
R/601/7284	VN8	Supporting the supply of veterinary medicines	3	5	RCVS external examination	Work-based progress log	
Y/601/7285	VN9	Veterinary nursing support of diagnostic Imaging	3	10	RCVS external examination	Work-based progress log	
D/601/7286	VN10	Veterinary nursing support of laboratory diagnostics	3	5	RCVS external examination	Work-based progress log	
H/601/7287	VN11	Supporting veterinary operating theatre practice	3	10	RCVS external examination	Work-based progress log	
L/601/7185	VN7	Essentials of practical veterinary nursing care for hospitalised animals	3	5		Work-based progress log	
J/601/6956	VN2	Professional relationships and communication for veterinary nursing practice	3	10	Case study assignment	Work-based progress log	
T/601/7178	VN6	Understanding the essentials of veterinary nursing care for hospitalised animals	3	10	RCVS external examination		
K/601/6965	VN3	Comparative functional anatomy for veterinary nursing practice	3	20	RCVS external examination		
K/601/7288	VN12	Principles of supporting veterinary anaesthesia	3	10	RCVS external examination		
M/601/7289	VN19	Preparing for professional registration	4	10	Independently moderated & examination		
Core credits			130				

#### Small animal option pathway (all units to be completed)

T/601/7729	SAVN14	Principles of peri-operative veterinary nursing support for small animals	3	10	Independently moderated assignment		RCVS Qualification assessment OSCE
T/601/7732	SAVN16	Principles of veterinary nursing support for small animal patients	3	10	Independently moderated assignment & examination		
H/601/7743	SAVN18	Principles of small animal veterinary nursing emergency and critical care	3	10	Independently moderated assignment & examination	Work-based progress log	
M/601/7728	SAVN13	Practical monitoring of small animal veterinary anaesthesia	3	10		Work-based progress log	
K/601/7730	SAVN15	Practical peri-operative veterinary nursing support for small animals	3	5		Work-based progress log	
R/601/7737	SAVN17	Practical veterinary nursing support of small animal patients	3	5		Work-based progress log	
Total SA credits			50				

#### Equine option pathway (all units to be completed)

M/601/7745	EQVN20	Principles of peri-operative veterinary nursing support for horses	3	10	Independently moderated assignment		
F/601/7748	EQVN22	Principles of veterinary nursing support for equine patients	3	10	Independently moderated assignment &		

A/601/7750	EQVN24	Principles of equine veterinary nursing emergency and critical care	3	10
F/601/7751	EQVN25	Principles of equine neonatal care	3	10
A/601/7747	EQVN21	Practical peri-operative veterinary nursing support for horses	3	5
J/601/7749	EQVN23	Practical veterinary nursing support of equine patients	3	5
Total EQ credits				50

examination		
Independently moderated assignment & examination	Work-based progress log	RCVS Qualification assessment OSCE
Independently moderated assignment & examination	Work-based progress log	
	Work-based progress log	
	Work-based progress log	

### Level 3 Certificate in Animal Nursing Studies

1.28. In order to achieve this qualification all individual unit assessments must be achieved. Candidates will not be required to undertake the OSCE (practical) examination associated with the Diploma qualification.

#### Unit level assessments

1.29. Candidates will be assessed using a variety of strategies:-

- Examinations set and administered by RCVS (MCQ tests)
- Assignments set and administered by centres and independently moderated
- Examinations set and administered by centres and independently moderated

1.30. RCVS examinations will be conducted through the Awarding Body's established systems for multiple choice examination, delivered via e-assessment.

1.31. Clinical skills will be assessed at unit level via the work-based Nursing Progress Log. Within core units, unless otherwise indicated, clinical skills will be learned in either the context of small animal or equine nursing, or a combination.

1.32. Assignments are set and marked by the centre according to marking criteria externally set by RCVS. Quality assurance is provided by the centre and must be independently moderated.

1.33. Centre-based examinations are set, administered and marked at centre level; quality assurance is provided by the centre and must be independently moderated.

#### Qualification level assessment

1.34. In order to the achievement of the required unit credits, the Diploma is subject to a summative Objective Structured Clinical (OSCE) Examination of essential veterinary nursing skills.

1.35. The OSCE is delivered by the Awarding Body in accordance with established systems and procedures.

#### Qualification grading

1.36. Assignments and centre- based examinations are graded fail, pass or merit. A score of 50% in all elements of an assignment and 65% in all elements of an examination is required to pass. In order to achieve a merit grade, candidates must achieve marks of at least 70% for an assignment and at least 85% in examinations. Where a unit assessment includes both an examination and assignment, merit grades must be achieved in both elements to achieve an overall unit merit.

1.37. In order to achieve an overall merit grade for the qualification, merit grades must have been achieved in a minimum of three unit assessments, to include unit VN 19, and in the external MCQ examinations.

1.38. Candidates who fail papers of an external examination will be credited with the elements passed and will be required only to re-sit the failed paper(s).

- 1.39. Compensation between elements of a centre-based unit independent assessment is limited to a maximum of five percentage marks. A pass grade may be achieved via this mechanism provided that the required total mark is achieved.

#### **Number of assessment attempts**

- 1.40. Candidates will be permitted to re-sit failed assessment attempts on a maximum of four occasions. Candidates who fail on three occasions will be required to undertake a programme of remedial study, deemed acceptable by the Awarding Body, of no less than four months under the appropriate supervision of their approved centre before attempting the assessment for a fourth and final attempt.
- 1.41. Candidates who fail an assessment on four occasions will have their registration for the award (or unit) terminated. Such candidates may apply for re-registration and, in doing so, must provide evidence to the Awarding Body that they have taken active steps to address their former difficulties and are in a reasonable position to achieve the qualification (or unit).
- 1.42. Candidates who pass an assessment on the second or subsequent occasion may achieve only the minimum pass mark.

#### **Competence of assessors and moderators**

- 1.43. The conduct and quality assurance of independent assessment for the awards complies with the Veterinary Nursing Assessment Strategy developed by the Sector Skills Council (Lantra).
- 1.44. Programme tutors and moderators must be occupationally competent (normally either registered veterinary nurses or registered (home practising) veterinary surgeons) in addition to holding appropriate educational qualifications. They should be qualified to QCF level 6 (or the equivalent) or be actively working towards a relevant qualification at this level and/or have significant, demonstrable and current experience of working in veterinary practice, or a related area, at this level.
- 1.45. Clinical coaches must be either registered veterinary nurses (RVN or REVN) or registered (home practising) veterinary surgeons (MRCVS). Centres must ensure that clinical coaches receive suitable training and continuing support for their role.

#### **REASONABLE ADJUSTMENTS, SPECIAL CONSIDERATION AND APPEALS**

- 1.46. Candidates who are able to provide evidence of special assessment needs (either educational or medical) will be catered for in accordance with the guidance provided in the RCVS Centre Handbook and Reasonable Adjustments Policy.
- 1.47. Requests for special assessment consideration will be addressed in accordance with RCVS Awarding Body policy.
- 1.48. Centres must have in place an auditable appeals procedure. If a candidate is not satisfied with the conduct of an assessment, the Head of Centre should address the problem via the appeals procedure. If the candidate remains dissatisfied with the outcome of his/her appeal RCVS will conduct a review of the process to ensure equitable management and outcome. All appeals must be clearly documented and made available to the Awarding Body if a review is requested.
- 1.49. Appeals in relation to RCVS external examinations will be conducted in accordance with the RCVS Examination Appeals Rules and procedures.

#### **CENTRE APPROVAL AND QUALITY ASSURANCE**

- 1.50. Delivery of these qualifications is subject to approval by the RCVS Awarding Body. New centres must apply for centre and qualification approval and will be subject to a site visit before approval can be granted. Existing RCVS-approved centres must apply for specific approval to deliver these qualifications.
- 1.51. Full details of the process for centre/qualification approval can be obtained from the Awarding Body.

- 1.52. Centres will be subject to a minimum of one external verification (EV) visit annually. The frequency of EV monitoring will be determined in accordance with assessed risk. During visits, audit will take place of programme delivery and administrative systems (including record-keeping), assessment, student support and training practice quality.

#### **REGISTRATION AND CERTIFICATION**

- 1.53. Candidates must be registered for the Diploma qualification (or for individual units) at the commencement of their course using the relevant application form available from RCVS. Registration for the Certificate qualification is not normally available; this is primarily a “step off” qualification from the Diploma..
- 1.54. Award certificates (or unit certificates) will be provided to candidates on receipt of a valid claim from the centre. Candidates must have passed all specified assessments in order to achieve the award (or unit).

## SECTION 2 QUALIFICATION UNITS

### Core units:

No	Title	level	credits
VN1	Understanding the operational requirements of a veterinary practice	3	10
VN2	Professional relationships and communication for veterinary nursing practice	3	10
VN3	Comparative functional anatomy for veterinary nursing practice	3	20
VN4	Applied animal welfare, health and husbandry for veterinary nurses	3	20
VN5	Infection control in veterinary practice	3	5
VN6	Understanding the essentials of veterinary nursing care for hospitalised animals	3	10
VN7	Essentials of practical veterinary nursing care for hospitalised animals	3	5
VN8	Supporting the supply of veterinary medicines	3	5
VN9	Veterinary nursing support of diagnostic imaging	3	10
VN10	Veterinary nursing support of laboratory diagnostics	3	5
VN11	Supporting veterinary operating theatre practice	3	10
VN12	Principles of supporting veterinary anaesthesia	3	10
VN19	Preparing for professional registration	4	10
Total core credits			130

Unit title:	<b>VN 1 Understanding the operational requirements of a veterinary practice</b>		
Unit code:	M/601/6871		
Level	3		
Credit value:	10		
Learning outcomes:		Assessment criteria:	
1	Understand the roles of members of the veterinary team	1.1 1.2 1.3	Compare and contrast the roles of a veterinary surgeon and a veterinary nurse Explain the role and functions of lay staff within a veterinary practice Outline the significance of the Veterinary Surgeons Act 1966
2	Understand the aims of effective health and safety within a veterinary practice	2.1 2.2 2.3 2.4	Explain the aims of health and safety practice Explain the principal risks in a veterinary practice, mentioning the environment, working hours, chemical and biological hazards Demonstrate how to move and handle animals and equipment safely, identifying risk factors and using ergonomic principles Explain the principles of handling and disposal of hazardous substances, to include sharps, biological and chemical materials
3	Understand how to use and maintain equipment in a veterinary practice	3.1 3.2 3.3	Describe the use of veterinary practice equipment, to include clinical furniture, powered and manual instrumentation, diagnostic imaging, laboratory and anaesthetic equipment Explain protocols for routine checking and maintenance of equipment by both internal practice staff and external agencies, to include frequency Explain how to identify equipment faults, to include action that should be taken in the event of malfunction
4	Understand how to maintain stocks of veterinary consumables and pharmaceuticals	4.1 4.2 4.3	Summarise the principles of stock control, mentioning record-keeping, storage conditions, stock rotation Identify the range of materials needed to support a veterinary practice, to include consumables, sterile supplies, pharmaceuticals, food Explain how to dispose of surplus and outdated materials, mentioning relevant legal requirements
5	Know the principles of record-keeping	5.1	Explain the principles of veterinary record-keeping, mentioning client and patient records, to include confidentiality, data protection, RCVS <i>Guides to Professional Conduct</i>
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates an understanding of working practices 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: RVN2		
Assessment	This unit is intended to form part of a qualification leading to a regulated		

requirements/guidance in relation to the Register of Veterinary Nurses	professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

### Teaching and learning guidance

#### 1 Understand the roles of members of the veterinary team

##### 1.1 Compare and contrast the roles of a veterinary surgeon and a veterinary nurse

Role and responsibilities of veterinary surgeons:-

Defining acts of veterinary surgery

Protection of animals' interests

The Veterinary Surgeons Act

RCVS *Guide to Professional Conduct*

Role of the veterinary nurse:-

Supportive care

Working within professional competence

RCVS *Guide to Professional Conduct for Veterinary Nurses*

Public image and professionalism

Define:-

Nursing assessment

Nursing care

Medical diagnosis

Veterinary treatment

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

Role of lay members of veterinary practice staff and limitations

##### 1.3 Outline the significance of the Veterinary Surgeons Act 1966

In relation to who may treat animals (provisions for owners, veterinary nurses, student veterinary nurses)

Delegation of acts of veterinary surgery by a veterinary surgeon

Accepting delegated work – veterinary nurses and student veterinary nurses

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

##### 2.1 Explain the aims of health and safety practice

Aims and effects of H&S:-

Reduction of risks

Identification of animals, clients and staff at special risk (examples:- asthma, pregnancy, age, spinal injuries)

Consequences of poor Health & Safety (human and economic costs)

Individual and employer accountability  
 Provisions of Health and Safety at Work Act  
 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

2.2 *Explain the principal risks in a veterinary practice, mentioning the environment, working hours, chemical and biological hazards*

Principal risks to H&S:-

Practice design, furnishings and equipment, security, shift patterns and working hours

Hazards - trip/slip, electrical, substances, biohazards, gases, radiation, patients

Infection - inter-animal, zoonoses

Infestation

Radiation:-

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

Safe handling of developer

Exposure monitoring and use of dosimeters

Provisions of Ionising Radiation Regulations 1999

2.3 *Demonstrate how to move and handle animals and equipment safely, identifying risk factors and using ergonomic principles*

Moving and handling of animals and equipment:-

Basic ergonomics – limitations of humans as load carriers

Identification of risks – positioning of loads, weight, stability, shape, handler factors (size, experience, physical condition etc)

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

Safe techniques for manually moving loads

Provisions of Manual Handling Operations Regulations

2.4 *Explain the principles of handling and disposal of hazardous substances, to include sharps, biological and chemical materials*

Disposal of waste:-

Disposal systems for household, commercial, offensive, hazardous waste, sharps and special waste

Storage and disposal of animal tissue and cadavers

Handling offensive and hazardous substances:-

Hazardous substances (blood and body fluids, animal tissue, pharmaceuticals, anaesthetic agents, scavenging systems and sharps)

Principles of safe handling and disposal

Control of Substances Hazardous to Health Regulations

3 **Know how to use and maintain equipment in a veterinary practice**

3.1 *Describe the use of veterinary practice equipment, to include clinical furniture, powered and manual instrumentation, diagnostic imaging, laboratory and anaesthetic equipment*

Using and maintaining equipment:-

Safe use of common equipment – adjustable tables, clippers, anaesthetic machines, scavenging equipment, syringes/needles

Maintenance protocols and manufacturers instructions

Reporting and managing unsafe equipment

3.2 *Explain protocols for routine checking and maintenance of equipment by both internal practice staff and external agencies, to include frequency*

Equipment types commonly used in practice to include:-

Diagnostic (in examination/consultation rooms), for example ophthalmoscope, otoscope, thermometers

Powered and manual surgical equipment/instruments:- laboratory, imaging, anaesthetic, clinical furniture

3.3 *Explain how to identify equipment faults, to include action that should be taken in the event of malfunction*

Management and reporting of risks:-  
Chemical and biological spills, glass breakages  
Infection, infestation  
Electrical faults, equipment fault  
Fire, gaseous leak  
Reporting risks and incidents

Protocols for routine checking and maintenance (daily, weekly, monthly, parameters to check)

Possible faults that may affect safety and reliability and what action should be taken

4 **Understand how to maintain stocks of veterinary consumables and pharmaceuticals**

4.1 *Summarise the principles of stock control, mentioning record-keeping, storage conditions, stock rotation*

Principles of pharmacy stock management:-  
Requirements for safe storage of medicines  
Schedules of controlled drugs and requirements for ordering, recording, delivery, usage and storage  
Legal requirements for record keeping of pharmacy stock  
Maintenance of effective records – sale, supply, use and legally required

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)

Damaged stock and discrepancies between order and stock delivery

Keeping stock in optimum condition for use - stock rotation, expiry dates, storage temperatures

Stock and equipment maintenance in consulting rooms, prep areas, kennels/cattery or stables, operating theatre

4.2 *Identify the range of materials needed to support a veterinary practice, to include consumables, sterile supplies, pharmaceuticals, and food.*

Range of materials necessary to support a veterinary practice

4.3 *Explain how to dispose of surplus and outdated materials, mentioning relevant legal requirements*

Basic disposal of unused medicines and equipment/materials

Safe disposal of surplus and outdated veterinary material  
Legislation covering disposal of surplus and waste materials

## 5 Know the principles of record-keeping

5.1 Explain the principles of veterinary record-keeping, mentioning client and patient records, to include confidentiality, data protection, RCVS Guides to Professional Conduct

Confidentiality

Principles of data protection

Sharing of information

RCVS Guides to Professional Conduct (veterinary and veterinary nursing)

Patient records

History taking and recording

Recording of observations

Use of abbreviations (risks, abbreviations in common use)

Receiving records from and supplying records to another veterinary professional

Principles of certification

Creating and maintaining basic records of financial transactions

### Assessment Guidance:

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit
<b>Summative assessments:</b>	Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.

	Type	Weighting	Comments	Assessment criteria:
1	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	All
2	Nursing Progress Log	50%	Work-based progress log	2.3, 2.4 3.2, 3.3 4.1, 4.3 5.1

Unit title:		<b>VN 2 Professional relationships and communication for veterinary nursing practice</b>	
Unit code:		J/601/6956	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand the dynamics of communication	1.1 1.2 1.3 1.4 1.5 1.6	Identify modes of communication encountered in veterinary practice Explore factors that may affect communication, to include culture, age, grief, use of language and sensory impairment Differentiate between communication styles, to include recognition of own style of communication Recognise how emotions affect communication, to include manifestations of grief and loss Explain the dynamics of effective face-to-face interaction, mentioning social and environmental factors, body language and feedback mechanisms Explain the specific demands and adaptations required in telephone communication
2	Be able to communicate with clients and colleagues	2.1 2.2	Take a patient history to include actively eliciting relevant information, correct interpretation of given facts, concise transmission of relevant information to a veterinary colleague Produce written clinical records, to include care plans, observations and client instructions, that are clear, comprehensive, comprehensible and legible
3	Understand factors affecting working relationships with clients and within the veterinary team	3.1 3.2	Explain factors that influence the human/animal relationship, to include culture and religion, socio-economic status Describe influences on relationships between members of an inter-professional team, to include perceptions, roles, expertise and responsibilities
4	Understand principles of customer service	4.1 4.2 4.3	Summarise the value of clients to a veterinary practice Explain important customer service factors for veterinary clients, to include information, courtesy, responsiveness, presentation of the practice Summarise the principles of handling a complaint
5	Be able to operate a veterinary reception desk	5.1 5.2	Greet and address clients appropriately, to include telephone and face to face communication Make appropriate appointments for clients, to include first appointments,

		5.3	emergencies and follow-ups
		5.4	Use veterinary record-keeping systems
		5.5	Take payments for treatment or retail services, to include credit cards, cheques, insurance claims
			Advise clients on the process of seeking second opinions or referrals
Additional information about this unit:			
Unit purpose and aim(s):	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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: A4		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

### Teaching and learning guidance

#### 1 Understand the dynamics of communication

##### 1.1 Identify modes of communication encountered in veterinary practice

Verbal and non-verbal communication

Recognising own communication style

Methods of adapting and improving own communication with others

##### 1.2 Explore factors that may affect communication, to include culture, age, grief, use of language and sensory impairment

Self explanatory

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

Communication styles (Two way discussion compared to authoritative statement), modes (telephone, face to face, video conference, internet) and models (questioning, listening)

##### 1.4 Recognise how emotions affect communication, to include manifestations of grief and loss

Awareness of and sensitivity to emotionally-charged situations:-

Serious illness and euthanasia

Supporting clients in making decisions about their animal's treatment

- Maintaining professional relationships with clients
- Supporting bereaved clients
- Supporting colleagues under pressure
- 1.5 *Explain the dynamics of effective face-to-face interaction, mentioning social and environmental factors, body language and feedback mechanisms*  
Self explanatory
- 1.6 *Explain the specific demands and adaptations required in telephone communication*  
Self explanatory
- 2 Be able to communicate with clients and colleagues**
- 2.1 *Take a patient history to include actively eliciting relevant information, correct interpretation of given facts, concise transmission of relevant information to a veterinary colleague*  
Self explanatory
- 2.2 *Produce written clinical records, to include care plans, observations and client instructions that are clear, comprehensive, comprehensible and legible*  
Veterinary terminology  
Abbreviations  
Principles of certification
- 3 Understand factors affecting working relationships with clients and within the veterinary team**
- 3.1 *Explain factors that influence the human/animal relationship, to include culture and religion, socio-economic status*  
Factors influencing behaviour and attitude towards animals:-  
Culture and religion  
Socio-economic status  
Health status
- 3.2 *Describe influences on relationships between members of an inter-professional team, to include perceptions, roles, expertise and responsibilities*  
Self explanatory
- 4 Understand principles of customer service**
- 4.1 *Summarise the value of clients to a veterinary practice*  
Critical to business growth  
Loyalty, word of mouth recommendations
- 4.2 *Explain important customer service factors for veterinary clients, to include information, courtesy, responsiveness, presentation of the practice*  
Self-explanatory, to include presentation and attitudes of staff
- 4.3 *Summarise the principles of handling a complaint*  
Courtesy and objectivity  
Keeping a record:- the complaint, responses given and action taken  
Addressing the subject of complaint  
Dealing with aggression/rudeness/abuse
- 5 Be able to operate a veterinary reception desk**
- 5.1 *Greet and address clients appropriately, to include telephone and face to face communication*  
Approach and personal presentation, professional manner  
Telephone technique  
Communication in front of clients e.g. to colleagues, other clients
- 5.2 *Make appropriate appointments for clients, to include first appointments, emergencies and follow-ups*  
Prioritising and eliciting relevant information, use of protocols  
Open and closed questioning  
Prioritising appointments, checking where condition of animal uncertain

Techniques for turning down inappropriate requests e.g. for unwarranted emergency appointment  
Using appointment booking systems

- 5.3 *Use veterinary record-keeping systems*  
Data storage and disclosure, legal requirements  
Confidentiality  
Keeping accurate and professional records
- 5.4 *Take payments for treatment or retail services, to include credit cards, cheques, insurance claims*  
Preparing invoices  
Taking and recording payments  
Insurance promotion/claims – FSA considerations  
Security
- 5.5 *Advise clients on the process of seeking second opinions or referrals*  
Second opinions:- supersession, procedures, RCVS Guide to Professional Conduct  
Referral procedures:- veterinary specialists and para-veterinary professionals

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.		
<b>Summative assessments:</b>				
	<b>Type</b>	<b>Weighting</b>	<b>Comments (including word count)</b>	<b>Assessment criteria</b>
1.	Case Study	50%	In accordance with the assessment specification provided	1.1-6 3.1-2 4.1-3
2.	Nursing Progress Log	50%	Work-based progress log	2.1-2 5.1-5

## UNIT VN2 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 1.1 Identify modes of communication encountered in veterinary practice**
- 1.2 Explain the dynamics of effective face-to-face interaction, mentioning social and environmental factors, body language and feedback mechanisms**
- 1.3 Differentiate between communication styles, to include recognition of own style of communication**
- 1.4 Recognise how emotions affect communication, to include manifestations of grief and loss**
- 1.5 Explore factors that may affect communication, to include culture, age, grief, use of language and sensory impairment**
- 1.6 Explain the specific demands and adaptations required in telephone communication**
- 3.1 Explain factors that influence the human/animal relationship, to include culture and religion, socio-economic status**
- 3.2 Describe influences on relationships between members of an inter-professional team, to include perceptions, roles, expertise and responsibilities**
- 4.1 Summarise the value of clients to a veterinary practice**
- 4.2 Explain important customer service factors for veterinary clients, to include information, courtesy, responsiveness, presentation of the practice**
- 4.3 Summarise the principles of handling a complaint**

The candidate will explore the dynamics of communication and customer service through specific critical incidents experienced by him/her within a veterinary practice. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

- Communicating with a new client
- Communicating with a “difficult” client
- Communicating with a client in a veterinary emergency

Course providers are advised to provide a different assignment brief for each cohort of students, focussed on one of the above options, in order to provide a standardised brief for candidates and reduce the possibility of plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- identify the style(s) mode and model(s) of communication involved in the chosen incident
- discuss the effectiveness of communication and customer service in the chosen incident(s) and explore possible ways in which this might have been improved (if appropriate)
- discuss how the role of personnel within the practice may affect how they communicate
- identify the factors that may affect a client’s interaction with the practice team

### Assignment length

The Awarding Body-suggested maximum word limit for this assignment is 3,000 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

**Submission**

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

### Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

Unit title:		<b>VN 3 Comparative functional anatomy for veterinary nursing practice</b>	
Unit code:		K/601/6965	
Level		3	
Credit value:		20	
Learning outcomes:		Assessment criteria:	
1	Know anatomical and physiological terminology in relation to veterinary nursing practice	1.1	Explain the use of directional terms, prefixes and suffixes, modes of body section and joint movement and the anatomical boundaries of body cavities.
2	Know anatomical landmarks in living animals that are relevant to veterinary nursing practice	2.1	Demonstrate the position of anatomical landmarks in intact animals, including dogs, cats, exotic species and horses to address musculoskeletal features, points of venous and arterial access and external genitalia
3	Understand the normal form and function of body systems in a range of mammalian species	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11	Explain basic cell structure, physiology and division Describe the structure of the skin, hair and associated glands Explain the structure and function of the musculoskeletal system Compare and contrast mammalian digestive tracts and modes of digestion Describe the functions of the autonomic and motor nervous systems and the special senses Explain the function of the endocrine system in relation to the control of body systems Describe the structure and function of the circulatory system Describe the structure of the respiratory system and explain the process of respiration Describe the urinary tract and explain the production of urine Explain the function of the kidney in maintaining blood pressure and homeostasis Explain reproductive physiology in the male and female; describe comparative reproductive tracts
4	Know the key anatomical features and body functions of birds and reptiles	4.1 4.2	Describe the key anatomical structures of birds and reptiles Explain the key ways in which the physiology of birds and reptiles differs from that of mammals
5	Be able to relate normal form and function to the effects of disorder in disease processes and the consequent nursing requirements of sick animals	5.1	Explain how compensatory mechanisms may give rise to symptoms of disease
Additional information about this unit:			
Unit purpose and aim(s):		This unit provides the student veterinary nurse with an appropriate theoretical knowledge of the normal structure and function of the major body systems of a range of species. The student should also develop the practical skills to identify visually, or by palpation, the key anatomical features and landmarks required in day to day nursing practice. The unit provides initial insight into how normal physiological function can be disrupted and how this relates to disease processes. The student will learn how such physiological changes may modify requirements for nursing care	
Unit expiry date:		30/07/2015	
Relationship with National Occupational Standards:		This unit provides underpinning knowledge for clinically focussed NOS units	
Assessment		This unit is intended to form part of a qualification leading to a regulated	

requirements/guidance in relation to the Register of Veterinary Nurses	professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	August 2010
Unit guided learning hours:	80

### Teaching and learning guidance

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

- 1.1 *Explain the use of directional terms, prefixes and suffixes, modes of body section and joint movement and the anatomical boundaries of body cavities*  
 Anatomical planes, directions and associated terms  
 Common pre-fixes and suffixes  
 Modes of movement of body segments and joints  
 Anatomical boundaries of body cavities

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

- 2.1 *Demonstrate the position of anatomical landmarks in intact animals, including dogs, cats, exotic species and horses to address musculoskeletal features, points of venous and arterial access and external genitalia*

Axial skeleton-occipital crest, angle of jaw, zygomatic arch, mandibular ramus, wing of atlas, dorsal spine of axis vertebrae, thoracic dorsal spinous processes, lateral processes of lumbar vertebrae, first rib, last rib, manubrium, xiphisternum

Fore-limb landmarks - spine of scapula, acromion, greater tubercle of humerus, humeral condyles, olecranon

Hind-limb and pelvis landmarks - wings of ilium, tuber ischii, brim of pubis, greater trochanter, patella, fabellae, tibial tuberosity, calcaneus

Veins - jugular, femoral, cephalic, saphenous

Equine:- Lateral thoracic

Small animal:- Lingual

Other landmarks and structures - larynx, trachea, heart, bladder, external genitalia

#### 3 **Understand the normal form and function of body systems in a range of mammalian species**

- 3.1 *Explain basic cell structure, physiology and division*  
 Cell structure and organelles visible under the light microscope  
 Key organelles visible under the electron microscope, nucleolus, mitochondria, lysosomes  
 Basic cell division, essential differences between meiosis and mitosis  
 Basic tissue types: epithelial, nervous, connective (dense and loose), blood, cartilage and bone, muscle (cardiac, skeletal and smooth)
- 3.2 *Describe the structure of the skin, hair and associated glands*  
 General structure of hairy skin  
 Structure and function of the equine hoof

Associated adnexa, sudiferous, sebaceous, ceruminous meibomian and mammary glands

3.3 *Explain the structure and function of the musculoskeletal system*

Functions of bones, muscles and joints

Classification of bones, muscles and joints with examples

Bones of the axial skeleton, equine guttural pouches

Bones of the thoracic limb

Bones of the pelvic limb

Endochondral and intramembranous ossification

Healing bone (see also *Unit VNT10 Surgical theatre practice for veterinary nurses*)

Major clinically relevant bony landmarks

Muscle terminology - origin insertion, action, tendon, aponeurosis, contraction, relaxation, tone, antagonistic pairing

Clinically relevant muscle groups - pectorals, biceps, triceps, gluteals, quadriceps, biceps femoris, gastrocnemius, cranial tibial, abdominal, hypaxial and epaxial

Distinction of tendon and ligament and list of clinically relevant ones, biceps, achilles, cruciate, collaterals.

Equine:- superficial and deep digital flexor tendons, suspensory ligament, medial patellar ligament, extensor tendons, all synovial structures, distal to and including stifle and elbow.

3.4 *Compare and contrast mammalian digestive tracts and modes of digestion*

Location, structure and function of the alimentary tract from lips to anus

Comparative digestion in different species (to include birds, reptiles, ruminants)

Dentition of carnivore, omnivore and exotic adaptation of the teeth

Anatomy of the generic tooth

Function and location of glands associated with digestion

Functions of the liver

3.5 *Describe the functions of the autonomic and motor nervous systems and the special senses*

Function of nervous system in controlling body systems

Structure and function of neurons

Nerve impulse transmission and basic reflex arc

List and locate clinically relevant peripheral nerves, radial, median, ulnar, sciatic and femoral

Functions of cranial nerves

Structure and basic physiology of special sense organs, ear and eye, brief description of modalities of taste, olfaction and touch

3.6 *Explain the function of the endocrine system in relation to the control of body systems*

Outline functions of the endocrine system and locate composite organs

3.7 *Describe the structure and function of the circulatory system*

Structure and function of circulatory system: heart and blood vessels

Function and formation of constituents of blood:- identification of cell types under the light microscope, sites of haematopoiesis

The path of blood through the circulatory system including the heart and hepatic portal systems

List and locate major vessels of the body - aorta, carotid, brachial, femoral and coccygeal arteries, cephalic, jugular, saphenous and coccygeal veins

The cardiac cycle, recognition of the cardiac cycle on an electrocardiograph, sinoatrial and atrioventricular nodes, purkinje system, origin of heart sounds

Equine second degree atrio-ventricular block

Outline factors controlling blood pressure and circulatory volume

Structure and function of the lymphatic system, location of its main components - lymph nodes, right lymphatic duct, composition and colour of lymph, thymus, spleen, lacteals, thoracic duct, structure of a lymph node, flow of lymph through nodes and vessels, palpation of superficial lymph nodes; immunity

3.8 *Describe the structure of the respiratory system and explain the process of respiration*

Structure and function of the respiratory system, airways and lungs

Define terms associated with respiration - tidal, minute, inspiratory and expiratory reserve volumes, dead space, vital and total lung capacities

Respiratory cycle

- Mechanisms of gaseous exchange
  - Neural control of respiration
  - Equine obligate nasal breathing
- 3.9 *Describe the urinary tract and explain the production of urine*  
Location, structure and function of the kidney and the tubular system leading to the urethral meatus including the bladder  
The nephron as a functional unit  
Role of the kidney in control of blood pressure and homeostasis  
Normal radiographic and ultrasonographic appearance of kidney and bladder
- 3.10 *Explain the function of the kidney in maintaining blood pressure and homeostasis*  
Renal endocrine functions
- 3.11 *Explain reproductive physiology in the male and female; describe comparative reproductive tracts*  
Location, structure and function of the male gonad and tubular system to the junction with the urethra  
Accessory male sex organs including a brief description of their purpose- differences between dog and cat  
Location, structure and function of the female gonad and tubular system up to and including the vulval vestibule  
Hormones controlling and produced by the male and female gonad
- 4 Know the key anatomical features and body functions of birds and reptiles**
- 4.1 *Describe the key anatomical structures of birds and reptiles*  
Skin  
Axial and appendicular skeleton  
Respiratory system  
Digestive system  
Cardiovascular system  
Uro-genital system
- 4.2 *Explain the key ways in which the physiology of birds and reptiles differs from that of mammals*  
Support and locomotion  
Integument and temperature control  
Sense organs  
Circulation  
Respiration  
Digestion  
Excretion
- 5 Be able to relate normal form and function to the effects of disorder in disease processes and the consequent nursing requirements of sick animals**
- 5.1 *Explain how compensatory mechanisms may give rise to symptoms of disease*  
Pyrexia  
Tachycardia, tachypnoea  
Hypotension, anuria  
Equine endotoxic cascade

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Centres should ensure suitable formative assessments accompany this unit		
<b>Summative assessments:</b>		Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.		
				<b>Assessment criteria:</b>
1	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	All
2	Nursing Progress Log	50%	Work-based progress log	2.1

Unit title:		VN 4 Applied animal welfare, health and husbandry for veterinary nurses	
Unit code:		J/601/7170	
Level		3	
Credit value:		20	
Learning outcomes:		Assessment criteria:	
1	Understand the principles of animal welfare	1.1	Summarise the legislation and codes of practice in place to protect animal interests, mentioning the Animal Welfare Act, DEFRA, animal welfare codes, Companion Animal Welfare Council
2	Understand the essential factors for maintaining animal health for a range of species	2.1	Explain the importance of key factors in maintaining animal health to include:- <ul style="list-style-type: none"> <li>▪ Housing</li> <li>▪ Feeding</li> <li>▪ Exercise</li> <li>▪ Grooming and foot care</li> <li>▪ Dental hygiene</li> <li>▪ Vaccination</li> <li>▪ Parasite control</li> </ul> in relation to dogs, cats, exotic species and horses
		2.2	Distinguish normal and abnormal presentations, mentioning behaviour, appearance, mobility, excretions
		2.3	Explain the principles of introducing new stock to an existing animal group
3	Know the nutritional requirements of animals	3.1	Explain the roles of essential nutrients, minerals and vitamins in dogs, cats, exotic species and horses
		3.2	Describe the differing nutritional requirements of very young, very old, breeding and performance animals
		3.3	Explain the effects of illness and injury on nutritional requirements
4	Understand the reproduction and breeding of animals	4.1	Explain key principles of genetic inheritance and define terms, including phenotype, genotype, allele
		4.2	Describe the breeding cycles of a range of species to include dogs, cats, exotic species and horses, mentioning natural mating, artificial insemination and pseudocycesis
		4.3	Explain the essentials of intra-partum care, to include preparations, normal labour and parturition, identification of complications and post-partum care
		4.4	Explain the nursing and management of neonates, to include recognition of abnormalities and complications
5	Know methods of animal identification	5.1	Explain methods of identifying a range of species, including dogs, cats, exotic species, and horses. To include: <ul style="list-style-type: none"> <li>▪ Breed</li> <li>▪ Markings, colours and distinguishing features</li> <li>▪ Owner registration (tattooing, microchips, tags, freeze-marking)</li> <li>▪ Passports</li> <li>▪ Blood typing, DNA testing</li> </ul>
		5.2	Describe the requirements for passports and record-keeping in relation to animal movements and medicine use

6	Be able to handle and restrain animals safely	6.1 6.2 6.3 6.4 6.5	Demonstrate correct techniques for catching, holding and restraining cats, dogs and exotic species, to include rabbits, birds, rodents and reptiles Demonstrate correct techniques for approaching, restraining and leading a horse, to include application of head collar and examination of a hoof Demonstrate the correct use of personal protective equipment when handling animals Explain how to recognise and deal with aggressive behaviour Explain how to transport a range of species safely, to include dogs, cats, exotic species and horses
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates an understanding of principles of animal 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN5, RVN9		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	80		

**Teaching and learning guidance****1 Understand the principles of animal welfare**

- 1.2 *Summarise the legislation and codes of practice in place to protect animal interests, mentioning the Animal Welfare Act, DEFRA, animal welfare codes, Companion Animal Welfare Council*  
 Define "Five Freedoms"  
 Animal Welfare Code  
 Role of welfare organisations

**2 Understand the essential factors for maintaining animal health for a range of species**

- 2.1 *Explain the importance of key factors in maintaining animal health to include:-*
- *Housing*
  - *Feeding*
  - *Exercise*
  - *Grooming and foot care*
  - *Dental hygiene*
  - *Vaccination*
  - *Parasite control*
- in relation to dogs, cats, exotic species and horses*  
 Systematic assessment of patient health  
 Feeding, grooming  
 Principles of dental hygiene, to include plaque control and scaling  
 Behaviour, observation of demeanour  
 Exercise, mobility  
 Excretions  
 Vaccination regimes, parasite control
- 2.2 *Distinguish normal and abnormal presentations, mentioning behaviour, appearance, mobility, excretions*  
 Self-explanatory
- 2.3 *Explain the principles of introducing new stock to an existing animal group*  
 Quarantine  
 Behaviour dynamics

**3 Know the nutritional requirements of animals**

- 3.1 *Explain the roles of essential nutrients, minerals and vitamins in dogs, cats, exotic species and horses*  
 Nutrition:-  
 Essential nutrients  
 Principal role of water  
 Fat and water soluble vitamins  
 Essential minerals  
 Altered requirements during illness
- Factors that stimulate appetite and salivary secretions and the role of the pancreas as an exocrine gland
- 3.2 *Describe the differing nutritional requirements of very young, adult, very old, breeding and performance animals*  
 Calculate nutritional and basic fluid needs
- Nutritional requirements in relation to species, life-stage, activity, working animals
- 3.3 *Explain the effects of illness and injury on nutritional requirements*  
 Metabolic rate  
 Altered digestion

#### 4 **Understand the reproduction and breeding of animals**

4.1 *Explain key principles of genetic inheritance and define terms, including phenotype, genotype, allele*

Essential genetic terms (phenotype, genotype, allele)

4.2 *Describe the breeding cycles of a range of species to include dogs, cats, exotic species and horses, mentioning natural mating, artificial insemination and pseudopregnancy*

Breeding cycles: natural breeding versus artificial insemination, the physiological needs of pregnant animals

Regulation of breeding cycles:-

Drugs

Day length cycles and temperatures

Other cycling females

Natural breeding versus artificial insemination, the physiological needs of pregnant animals

Pseudopregnancy

4.3 *Explain the essentials of intra-partum care, to include preparations, normal labour and parturition, identification of complications and post-partum care*

Stages of foetal development

Hormonal controls

Parturition:-

- Normal parturition
- Stages of labour
- Complications of labour and delivery
- Post partum care
- Recognition of maternal post partum complications

Supporting owners to prepare for parturition

4.4 *Explain the nursing and management of neonates, to include recognition of abnormalities and complications*

Neonatal care – nursing and management

Recognition of neonatal post partum complications and conditions

#### 5 **Know methods of animal identification**

5.1 *Explain methods of identifying a range of species, including dogs, cats, exotic species and horses*

To include:-

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

Methods of identification:

Breed

Distinguishing features

Owner registration – tattooing, microchips, freeze marking, branding

Passports

DNA testing

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

Pet passports

Equine passports

Record keeping in relation to animal movements

Equine - medicine controls

Principles and practices of safe animal transportation

- 6 Be able to handle and restrain animals safely**
- 6.1 Demonstrate correct techniques for catching, holding and restraining cats, dogs and exotic species, to include rabbits, birds, rodents and reptiles  
Self explanatory
- 6.2 Demonstrate correct techniques for approaching, restraining and leading a horse, to include application of head collar and examination of a hoof  
Self explanatory
- 6.3 Demonstrate the correct use of personal protective equipment when handling animals  
Taking into account species
- 6.4 Explain how to recognise and deal with aggressive behaviour  
Signs of aggression  
Methods of approach, safe restraint  
Methods of handling  
Catchers, crush cages, use of muzzles
- 6.5 Explain how to transport a range of species safely, to include dogs, cats, exotic species and horses  
Animal handling and restraint:-  
Methods and equipment used  
Handling difficult patients  
Basic animal training
- Impact of sensory changes on behaviour:-  
Blindness  
Deafness  
Senility

**Assessment Guidance:**

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit
<b>Summative assessments:</b>	Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.

	Type	Weighting	Comments	Assessment criteria:
1.	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1 2.1-3 3.1-3 4.1-4 5.1-2
2.	Nursing Progress Log	50%	Work-based progress log	6.1-5

Unit title:		<b>VN 5 Infection control in veterinary practice</b>	
Unit code:		L/601/7171	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Understand the role of infection in animal and human health	1.1 1.2 1.3	Identify the major groups of disease-producing infectious agents in relation to animal health, to include viruses, bacteria, fungi, protozoa, parasites, prions Explain the risks of zoonoses, including animal to human transmission and vice versa Explain the implications of antibiotic resistance for veterinary practice, to include MRSA
2	Understand the principles of disease transmission in veterinary practice	2.1	Describe how microorganisms are transmitted, to include: <ul style="list-style-type: none"> <li>▪ direct and indirect spread</li> <li>▪ inhalation, inoculation and ingestion</li> <li>▪ reservoirs, fomites and carriers</li> </ul>
3	Understand the principles of disinfection and sterilisation	3.1 3.2 3.3 3.4 3.5	Distinguish between the processes of disinfection and sterilisation, to include antisepsis and asepsis Explain the use of clinical antiseptics and disinfectants, to include susceptibility of different classes of organisms and how this affects choice, safe use Explain the process of sterilisation, to include steam, gas, cold chemicals and gamma radiation Describe the operation of an autoclave, to include safety, loading, monitoring of effective sterilisation Explain how to pack, label and store autoclaved items
4	Understand how to maintain a clean clinical environment	4.1 4.2	Apply principles of effective clinical cleaning, to include consulting rooms, kennel accommodation, stabling, laboratory, operating theatre Apply safe principles of waste handling and disposal in relation to contaminated materials, to include blood, urine, faeces, tissue, cadavers
5	Understand how to maintain personal hygiene in relation to cross-infection	5.1 5.2 5.3	Explain the importance of personal hygiene and dress in relation to infection control, mentioning hair, nails, jewellery, badges, sleeves, ties Demonstrate effective hand hygiene, to include antiseptic washes and alcohol gels Demonstrate appropriate use of disposable protective clothing, to include gloves and aprons
6	Understand the principles of infection monitoring	6.1 6.2	Explain the importance of infection monitoring in clinical audit Analyse the role of the veterinary nurse in maintaining infection control, to include audit, staff training and mentorship, providing a role model
Additional information about this unit:			
Unit purpose and aim(s):		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	
Unit expiry date:		31/07/2015	

Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: RVN3
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	20

### Teaching and learning guidance

#### 1 Understand the role of infection in animal and human health

##### 1.1 Identify the major groups of disease-producing infectious agents in relation to animal health, to include viruses, bacteria, fungi, protozoa, parasites, prions

Nature of micro organisms – viruses, bacteria, fungi, protozoa in relation to risk assessments and personnel

Nature of parasites – common endo and ectoparasites

Major groups of disease producing infectious agents in relation to animal health:(4.3.1)

Viruses

Bacteria

Fungi

Protozoa

Parasites

Prions

The meaning of infection, contagion, colonisation and contamination

##### 1.2 Explain the risks of zoonoses, including animal to human transmission and vice versa

Zoonotic diseases:-

e.g. toxoplasmosis, leptospirosis, toxocarasis, salmonella, campylobacter, psittacosis

Risks to human health

Precautions

##### 1.3 Explain the implications of antibiotic resistance for veterinary practice, to include MRSA

Antibiotic use and compliance

Development of resistance

#### 2 Understand the principles of disease transmission in veterinary practice

##### 2.1 Describe how microorganisms are transmitted, to include:

- direct and indirect spread
- inhalation, inoculation and ingestion
- reservoirs, fomites and carriers
- incubation periods

Common routes of transmission

Direct and indirect spread

Hand hygiene, protective equipment

Fomites, carriers, reservoirs

**3 Understand the principles of disinfection and sterilisation**

3.1 *Distinguish between the processes of disinfection and sterilisation, to include antisepsis and asepsis.*

Sterilisation, disinfection, asepsis and antisepsis

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

3.2 *Explain the use of clinical antiseptics and disinfectants, to include susceptibility of different classes of organisms and how this affects choice, safe use*

Commonly used antiseptics/disinfectants and their effect

Safe and effective usage

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

3.3 *Explain the process of sterilisation, to include steam, gas, cold chemicals and gamma radiation*

Methods of sterilisation used for surgical instruments and sterile supplies

Suitability, hazards and limitations of the various methods

3.4 *Describe the operation of an autoclave, to include safety, loading, monitoring of effective sterilisation*

Types of autoclave – downward displacement, vacuum assisted

Siting of autoclaves

Safe and effective use

Efficiency testing

3.5 *Explain how to pack, label and store autoclaved items*

Materials used – textile and paper wraps, seal and peel pouches, nylon film, boxes, drums

Packing methods

Labelling

Sterility indicators

**4 Understand how to maintain a clean clinical environment**

4.1 *Apply principles of effective clinical cleaning, to include consulting rooms, kennel accommodation, stabling, laboratory, operating theatre*

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, kennels, theatre

Specialist cleaning equipment e.g pressure washers

4.2 *Apply safe principles of waste handling and disposal in relation to contaminated materials, to include blood, urine, faeces, tissue, cadavers*

Handling contaminated materials, body tissue, fluids

Disposal systems

Storage and disposal of cadavers

Legal waste disposal requirements

**5 Understand how to maintain personal hygiene in relation to cross-infection**

5.1 *Explain the importance of personal hygiene and dress in relation to infection control, mentioning hair, nails, jewellery, badges, sleeves, ties*

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 Methicillin Resistant Staphylococcus Aureus (MRSA) and resistant streptococcus, gastro-intestinal infections (including C Difficile), dermatophytosis

- 5.2 *Demonstrate effective hand hygiene, to include antiseptic washes and alcohol gels*  
 Hand-washing techniques – effective technique, WHO method  
 Materials – detergent antiseptics, scrubbing brushes, towels  
 Use of hand decontaminant alcohol gels
- 5.3 *Demonstrate 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)
- 6 Understand the principles of infection monitoring**
- 6.1 *Explain the importance of infection monitoring in clinical audit*  
 Incidence monitoring  
 Routine environmental swabbing  
 Autoclave monitoring
- 6.2 *Analyse the role of the veterinary nurse in maintaining infection control, to include audit, staff training and mentorship, providing a role model*  
 Animal welfare  
 Maintaining safe environment for colleagues and clients  
 Key principles of nursing care  
 Professional accountability

Assessment Guidance:				
<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit			
<b>Summative assessments:</b>	Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.			
	Type	Weighting	Comments	Assessment criteria:
1.	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1-3 2.1 3.1-5 4.1-2 5.1 6.1-2
2.	Nursing Progress Log	50%	Work-based progress log	4.1-2 5.2-3

Unit title:		<b>VN 6 Understanding the essentials of veterinary nursing care for hospitalised animals</b>	
Unit code:		T/601/7178	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand the principles of a systematic approach to the provision of nursing care	1.1 1.2 1.3 1.4	Differentiate between the “medical” model of nursing and the nursing-focussed model Explain the “Nursing Process”, mentioning a logical cycle of planning, implementation and evaluation Compare models of nursing, to include Roper, Logan and Tierney and Orem Use a reflective approach to support nursing problem solving
2	Understand how to assess the condition of patients	2.1 2.2 2.3 2.4	Explain how a nursing model is used to inform patient assessment, to include physical, behavioural and owner-related factors Differentiate between actual and potential nursing problems Use an assessment protocol to examine an animal Explain how to record and monitor vital signs, to include temperature, pulse, respiration, capillary refill time and mucous membranes, blood pressure
3	Be able to follow a care plan to deliver nursing care	3.1 3.2 3.3	Use a care plan to inform delivery of nursing care across a range of veterinary conditions, to include medically and surgically related problems Recognise clinical and behavioural indicators of a change in condition, to include responses to shock, infection, pain and stress Report on patients and nursing activities in order to inform the review of care plans
4	Understand the use of different types of accommodation for hospitalised animals	4.1 4.2	Explain the requirements of hospital accommodation for small animals and horses, to include: <ul style="list-style-type: none"> <li>▪ Layout and access to facilities</li> <li>▪ Size, design and construction materials</li> <li>▪ Maintaining temperature and ventilation</li> <li>▪ Isolation</li> <li>▪ Bedding and substrates</li> </ul> Summarise safety considerations in relation to the use of accommodation and associated equipment, to include design, state of repair, fitness for purpose
5	Understand the nursing care and management of patients taking into account species, life-stage and temperament	5.1 5.2	Explain the care needs of patients in relation to commonly encountered diseases and traumatic conditions, to include: <ul style="list-style-type: none"> <li>▪ Recumbency</li> <li>▪ Post- surgical care</li> <li>▪ Trauma</li> <li>▪ Requirement for fluid therapy</li> <li>▪ Requirement for assisted feeding</li> <li>▪ Containment and physical therapies</li> </ul> Outline principles of species-specific nursing, mentioning cats, dogs, exotics and horses, to include medical and surgical nursing needs
6	Know how to administer medications	6.1	Explain techniques for administering medicines to include: <ul style="list-style-type: none"> <li>▪ Oral</li> <li>▪ Rectal</li> </ul>

		6.2	<ul style="list-style-type: none"> <li>▪ Topical</li> <li>▪ Parenteral</li> <li>▪ Sites commonly used for injection</li> <li>▪ Care of intravenous cannulae</li> </ul> Describe requirements for the safe disposal of used equipment and surplus medication
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates an understanding of the essentials of nursing sick animals 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		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN6, RVN7, RVN9, RVN10		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

### Teaching and learning guidance

- 1 **Understand the principles of a systematic approach to the provision of nursing care**
  - 1.1 *Differentiate between the “medical” model of nursing and the nursing-focussed model*

Medical model – diagnosis and treatment of disease  
 Nursing model – supportive care based on individual patient needs  
 Origins, aims of nursing models  
 Veterinary surgeon and veterinary nursing roles:-  
 Defining:-  
 Nursing assessment  
 Nursing care  
 Medical diagnosis  
 Veterinary treatment
  - 1.2 *Explain the “Nursing Process”, mentioning a logical cycle of planning, implementation and evaluation*

Introduction to the Nursing Process:-  
 Elements of a care plan (assessment, planning, delivery, evaluation)  
 Introduction to simple frameworks for care planning (Roper, Logan & Tierney or Orem)
  - 1.3 *Compare models of nursing, to include Roper, Logan and Tierney and Orem*

Compare in relation to nursing situation, suitability for veterinary nursing
  - 1.4 *Use a reflective approach to support nursing problem solving*

Process of reflection  
 Value of reflection in learning, improving practice  
 Using a reflective model e.g. Gibbs  
 Reflective diaries, commentary

## 2 Understand how to assess the condition of patients

2.1 *Explain how a nursing model is used to inform patient assessment, to include physical, behavioural and owner-related factors*

In-patient assessment, using a logical sequence and methodology  
 Holistic approach

2.2 *Differentiate between actual and potential nursing problems*

Identifying actual and potential nursing problems  
 Planning to prevent problems e.g. decubitus ulcers

2.3 *Use an assessment protocol to examine an animal*

Using a model as a framework for assessment in relation to:-  
 Admission  
 Equine passport

2.4 *Explain how to record and monitor vital signs, to include temperature, pulse, respiration, capillary refill time and mucous membranes, blood pressure*

Normal parameters of the vital signs - dog, cat, rabbit, horse  
 Techniques for measuring vital signs e.g. correct use and placement of thermometers  
 Collection of relevant data and recording using graphical methods  
 Reasons for abnormalities and variations in vital sign parameters  
 Descriptive and functional terms associated with pulse, respiration and body temperature  
 Locations of pulse points, use of and maintenance of stethoscope, measuring blood pressure  
 Normal appearance of mucous membranes, normal CRT

## 3 Be able to follow a care plan to deliver nursing care

3.1 *Use a care plan to inform delivery of nursing care across a range of veterinary conditions, to include medically and surgically related problems*

Application of care plans:-  
 Interpreting given care plans  
 Contributing to care planning. Applying a standard framework for patient assessment and nursing care. Understanding and implementing a given care plan in the management of the inpatient as directed by qualified staff

3.2 *Recognise clinical and behavioural indicators of a change in condition, to include responses to shock, infection, pain and stress*

Effects of stress and pain on in-patient condition  
 Recognition of pain, distress and deterioration  
 Management strategies

3.3 *Report on patients and nursing activities in order to inform the review of care plans*

Making relevant and accurate reports  
 Recognising significant factors

## 4 Understand the use of different types of accommodation for hospitalised animals

4.1 *Explain the requirements of hospital accommodation for small animals and horses, to include:*

- *Layout and access to facilities*
- *Size, design and construction materials*
- *Maintaining temperature and ventilation*
- *Isolation*
- *Bedding and substrates*

Ward layout and access to facilities  
 Accommodation size, design and maintenance  
 Construction materials and their properties  
 Maintaining environmental conditions and provision of additional heat  
 Isolation accommodation

Substrates and bedding materials: uses and disposal

- 4.2 *Summarise safety considerations in relation to the use of accommodation and associated equipment, to include design, state of repair, fitness for purpose*  
 Safe use of accommodation and equipment  
 Maintenance protocols  
 Reporting and managing unsafe accommodation and equipment  
 Appropriate accommodation for requirements of animal and personnel

5 **Understand the nursing care and management of patients taking into account species, life-stage and temperament**

- 5.1 *Explain the care needs of patients in relation to commonly encountered diseases and traumatic conditions, to include:*

- *Recumbency*
- *Post- surgical care*
- *Trauma*
- *Requirement for fluid therapy*
- *Requirement for assisted feeding*
- *Containment and physical therapies*

Examples of the clinical effects of commonly encountered diseases and traumatic conditions that may require supervised nursing care

Recognition of normal and abnormal excretions/secretions and their implications:-

Urine and faeces

Ophthalmic, nasal, aural, reproductive and oral secretions

Vomiting and reflux

Regurgitation (fluids/solids)

- 5.2 *Outline principles of species-specific nursing, mentioning cats, dogs, exotics and horses, to include medical and surgical nursing needs*  
 Provision of nursing care and stimulation to in-patients in health and ill-health

Nursing plans that take into account mental stimulation, care and attention, grooming or equivalent for species, nutrition, fluids and feeding patterns, mobility, hygiene and elimination

Records for hospitalised patient care

Physiological effects of recumbency and hospitalisation and measures to reduce effects

Basic post operative patient care and the physiological effects of recovery from a range of anaesthetic agents

Planning for discharge:

Assessment of patient condition prior to discharge

Guidance for owners (home care, post – operative issues, medication, possible complications)

Basic wound care and management:

Aseptic techniques in wound management

Application of dressings and bandages

Identify purposes and types of bandage – dressing retention, pressure, support

6 **Know how to administer medications**

- 6.1 *Explain techniques for administering medicines to include:*

- *Oral*
- *Rectal*
- *Topical*
- *Parenteral*
- *Sites commonly used for injection*
- *Care of intravenous cannulae*

Methods and routes of administration to a range of small animal species and horses

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

Principles, precautions and limitations of administering medication by subcutaneous, intramuscular and intravenous injection  
 Techniques for administration of medicines  
 Commonly used injection sites in dogs, cats, exotic species (rabbit, rodent, bird and reptile) and horses  
 Requirements for nursing observation following administration of medication

- 6.2 *Describe requirements for the safe disposal of used equipment and surplus medication*  
 Basic disposal of unused medicines and equipment/materials  
 Disposal of equipment used for administration of injections

Assessment Guidance:				
<b>Formative assessments:</b>		Centres should ensure suitable formative assessments accompany this unit		
<b>Summative assessments:</b>		Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.		
	Type	Weighting	Comments	Assessment criteria:
1.	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1-4 2.1, 2.2, 2.4 4.1-2 5.1-2 6.1-2
2.	Nursing Progress Log	50%	Work-based progress log	2.3 3.1-3

Unit title:		VN 7 Essentials of practical veterinary nursing care for hospitalised animals	
Unit code:		L/601/7185	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Be able to assess and monitor the condition of patients	1.1 1.2 1.3 1.4 1.5 1.6	Assess and record overall condition and demeanour, to include appearance and behaviour Assess and record temperature, pulse, respiration and mucous membranes Assess and record levels of consciousness Observe and monitor excretion, to include urine, faeces and vomitus/gastric reflux Assess and monitor for signs of pain and/or anxiety Report observations of animals effectively to colleagues
2	Be able to maintain the hygiene of in-patients	2.1 2.2 2.3	Clean, prepare and maintain accommodation for in-patients to include: <ul style="list-style-type: none"> <li>▪ Differing requirements of species</li> <li>▪ Nature of clinical condition</li> </ul> Demonstrate maintenance of hygiene for individual patients, to include: <ul style="list-style-type: none"> <li>▪ Grooming and bathing</li> <li>▪ Cleansing of orifices</li> </ul> Demonstrate appropriate methods of handling and disposing of soiled and infected material
3	Be able to provide food and fluids to in-patients	3.1 3.2 3.3 3.4	Prepare appropriate food and fluids for patients taking into account: <ul style="list-style-type: none"> <li>▪ Medical dietary requirements</li> <li>▪ Type and size of animal</li> <li>▪ Known likes, dislikes and normal feeding regimes</li> </ul> Demonstrate methods of assisted feeding, to include: <ul style="list-style-type: none"> <li>▪ Hand feeding</li> <li>▪ Syringe feeding</li> <li>▪ Tube feeding</li> </ul> Monitor and maintain intravenous fluid therapy Monitor and record fluid and dietary intake
4	Be able to address the mobility and behavioural requirements of in-patients	4.1 4.2	Provide care for patients with compromised mobility, to include: <ul style="list-style-type: none"> <li>▪ Positioning and changes of position</li> <li>▪ Bedding requirements</li> <li>▪ Physiotherapy</li> </ul> Use strategies to address the psychological needs of in-patients, to include: <ul style="list-style-type: none"> <li>▪ Environment</li> <li>▪ Grooming and touch</li> <li>▪ Addressing stress, boredom</li> </ul>
5	Be able to apply simple wound dressings and bandages	5.1 5.2 5.3	Perform a simple wound dressing, to include: <ul style="list-style-type: none"> <li>▪ Use of aseptic technique</li> <li>▪ Preparation of materials</li> <li>▪ Observation and reporting of wound condition</li> </ul> Apply simple bandages that are safe and effective Use strategies to prevent patient interference with dressings and bandages
6	Be able to administer medications	6.1	Interpret veterinary prescriptions and prepare medications for administration, to include:

		6.2	<ul style="list-style-type: none"> <li>▪ Oral preparations</li> <li>▪ Rectal preparations</li> <li>▪ Topical medicines</li> <li>▪ Medicines for injection</li> </ul> Administer medicines to include: <ul style="list-style-type: none"> <li>▪ Oral</li> <li>▪ Topical</li> <li>▪ Parenteral</li> </ul>
		6.3	Dispose of used equipment and surplus medication appropriately and safely
		6.4	Record the administration of medicines and monitor its effect on the animal
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates practical competence in the essentials of nursing sick animals 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		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN6, RVN7, RVN9, RVN10		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	20		

### Teaching and learning guidance

This unit concerns the learning of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

**Assessment Guidance:**

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit
<b>Summative assessments:</b>	

	Type	Weighting	Comments	Assessment criteria:
	Nursing Progress Log	100%	Work-based progress log	All

Unit title:		<b>VN 8 Supporting the supply of veterinary medicines</b>	
Unit code:		R/601/7284	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Understand the legal requirements in relation to the storage and supply of veterinary medicines	1.1	Explain the law in relation to veterinary medicines, to include: <ul style="list-style-type: none"> <li>▪ the Veterinary Medicines Regulations</li> <li>▪ registration of premises</li> <li>▪ legal categories of medicines</li> <li>▪ veterinary prescribing cascade (food and non-food animals)</li> <li>▪ storage and disposal requirements</li> <li>▪ record-keeping</li> </ul>
		1.2	Explain the role, remit and professional responsibilities of a Suitably Qualified Person (SQP)
2	Know how to supply veterinary medicines to clients	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	Summarise information that should be obtained from a client to enable an appropriate choice of medication for supply by an SQP
		2.5	Explain how to calculate and dispense appropriate quantities of medication
		2.6	Demonstrate how to dispense medicines safely and effectively, to include correct prescription, safe handling of medicines
3	Understand the principles of pharmacodynamics	3.1	Describe ways in which medicines act and are excreted, to include: <ul style="list-style-type: none"> <li>▪ action</li> <li>▪ excretion</li> <li>▪ common side effects</li> <li>▪ handling precautions</li> <li>▪ contraindications</li> <li>▪ nursing implications</li> </ul>
		3.2	Explain factors that can affect duration of action
		3.3	Explain the mechanisms for reporting adverse reactions
4	Know how to provide advice to clients on the administration of veterinary medicines	4.1	Summarise information that should be provided to a client concerning the administration of a prescribed medicine
		4.2	Demonstrate to clients suitable techniques for administering medicine, to include instruction, demonstration and written guidance
Additional information about this unit:			
Unit purpose and aim(s):		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	
Unit expiry date:		31/07/2015	
Relationship with National Occupational Standards:		This relates to the following Veterinary Nursing NOS units: RVN29, RVN30	

Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	20

### Teaching and learning guidance

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

##### 1.1 Explain the law in relation to veterinary medicines, to include:

- the Veterinary Medicines Regulations
- registration of premises
- legal categories of medicines
- veterinary prescribing cascade (food and non-food animals)
- storage and disposal requirements
- record-keeping

Legislation affecting medicines, legal categories and routes of administration

Schedules of controlled drugs and requirements for ordering, recording, delivery, usage and storage

Legal requirements for record keeping of pharmacy stock

Requirements for safe storage of medicines (9.1.2)

Prescribing proprietary versus generic drugs under the cascade system

Appropriate and inappropriate use of unlicensed drugs

Meat withdrawals, relevance in food animals, recording in equine passports

Legislation and guidance: (9.2.4)

- DEFRA, Veterinary Medicines Directorate, Veterinary Medicines Regulations
- Animal Medicines Training Regulations Agency (AMTRA)
- VMD code of practice

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

VMD Code of Practice, role of AMTRA, registration and CPD obligations

#### 2 Know how to supply veterinary medicines to clients

##### 2.1 Explain the requirements for a legal veterinary prescription

Principles, practice and legal requirements for a valid prescription

##### 2.2 Interpret pharmacy terminology and abbreviations

Proprietary and generic names of medicines

Common abbreviations for route of administration, frequency and time of administration

##### 2.3 Summarise requirements for the packaging and labelling of veterinary medicines

Principles of safe dispensing:-

Recommended containers for veterinary medicines

Precautions when handling medicines

Formulae used to calculate dosages and quantities for dispensing

Standard and international units

Product labelling  
Stock rotation and storage requirements

Categories in use governing sale and supply of veterinary medicines:-

Prescription-only medicine – veterinarian (known as POM-V)

Prescription-only medicine – veterinarian, pharmacist, suitably qualified person. (known as POM-VPS)

Non-food animal – veterinarian, pharmacist, suitably qualified person (known as NFA-VPS)

Authorised veterinary medicine – general sales list (known as AVM-GSL)

2.4 *Summarise information that should be obtained from a client to enable an appropriate choice of medication for supply by an SQP*

Condition – client or veterinary diagnosis, identifying infestation, limitations on SQP “diagnosis”

Previous supply – where and when

Last veterinary examination

2.5 *Explain how to calculate and dispense appropriate quantities of medication*

Formulae used to calculate dosages

Use of calculators, importance of gross error checks

Loose tablets, bubble packs

2.6 *Demonstrate how to dispense medicines safely and effectively, to include correct prescription, safe handing of medicines*

Self explanatory

### 3 **Understand the principles of pharmacodynamics**

3.1 Describe ways in which medicines act and are excreted, to include:

- *Action*
- *Excretion*
- *Common side effects*
- *Handling precautions*
- *Contraindications*
- *Nursing implications*

Terms used in pharmacology

Pharmacology of commonly used classes of veterinary drugs:-

Action

Excretion

Uses

Nursing implications

Common side effects

Handling precautions

Contraindications of the following:-

Ecto- and endoparasiticides

Antimicrobials

Opiate Analgesics

Cardiovascular

Diuretics

Cytotoxic/Antineoplastic

Corticosteroids

Non steroidal anti-inflammatory drugs

Sedatives/tranquillisers

Anti-epileptics

Anti-histamines

Vaccines

Anti-emetics

3.2 *Explain 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

3.3 *Explain the mechanisms for reporting adverse reactions*  
 Recognition of adverse reactions  
 Reporting to VMD

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

4.1 *Summarise information that should be provided to a client concerning the administration of a prescribed medicine*  
 Purpose of medication  
 Safe handling and disposal  
 Route of administration  
 Adverse reactions  
 Compliance

4.2 *Demonstrate to clients suitable techniques for administering medicine, to include instruction, demonstration and written guidance*  
 Principles of effective demonstration  
 Pitching level of instruction and guidance  
 Checking understanding  
 Follow-up

Assessment Guidance:				
<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit			
<b>Summative assessments:</b>	Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.			
	Type	Weighting	Comments	Assessment criteria
1.	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1-2 2.1-5 3.1-3 4.1
2.	Nursing Progress Log	50%	Work-based progress log	2.6 4.2

Unit title:		<b>VN 9 Veterinary nursing support of diagnostic imaging</b>	
Unit code:		Y/601/7285	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Know the legal requirements for operating radiographic equipment in a veterinary practice	1.1	Describe the legal requirements for radiography in veterinary practice, to include: <ul style="list-style-type: none"> <li>▪ Authorised personnel</li> <li>▪ Health and safety</li> </ul>
		1.2	Explain the requirements for exposure risk assessment and monitoring
		1.3	Summarise requirements for the use of personal protective equipment when dealing with radiation
2	Understand the principles of radiography	2.1	Describe the properties and effects of radiation, to include: <ul style="list-style-type: none"> <li>▪ Function of equipment, to include tube head, light beam diaphragm</li> <li>▪ Primary beam and scatter</li> <li>▪ Absorption by different materials/tissues</li> <li>▪ Effects of kV and mA</li> </ul>
		2.2	Summarise types of image that can be produced using radiation, to include X-rays, scintigraphy and coaxial tomography (CT)
		2.3	Explain the features and use of cassettes and grids
		2.4	Summarise the design features and maintenance of a radiography facility, to include equipment
		2.5	Explain how to calculate exposure factors
3	Know the principles of adjuvant imaging techniques	3.1	Summarise how images are produced using ultrasound
		3.2	Describe the care and maintenance of ultrasound equipment
		3.3	Summarise how images are produced by magnetic resonance
		3.4	Explain the principles of endoscopy and the care, maintenance and storage of equipment
		3.5	Describe requirements for supporting imaging using radioactive isotopes (scintigraphy)
4	Understand how to take radiographs	4.1	Summarise methods of patient restraint for radiographic examination
		4.2	Demonstrate standard radiographic positions and the use of positioning aids, to include views (appropriate to species) of: <ul style="list-style-type: none"> <li>▪ Limbs</li> <li>▪ Head</li> <li>▪ Spine</li> <li>▪ Abdomen</li> <li>▪ Thorax</li> <li>▪ Pelvis</li> </ul>
5	Know how to process radiographs	5.1	Explain the principles of wet film processing, to include: <ul style="list-style-type: none"> <li>▪ Use, storage and disposal of chemicals</li> <li>▪ Function and care of automatic processor</li> <li>▪ Recognition of film faults</li> </ul>
		5.2	Explain the principles of digital imaging
		5.3	Explain the advantages and limitations of digital radiography
		5.4	Evaluate the diagnostic quality of a processed radiograph

Additional information about this unit:	
Unit purpose and aim(s):	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
Unit expiry date:	31/07/2015
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN18, RVN19, RVN20
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

### Teaching and learning guidance

#### 1 Know the legal requirements for operating radiographic equipment in a veterinary practice

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

- Authorised personnel
- Health and safety

Health and safety:-

Legislation

Methods of monitoring and limiting exposure risks

Considerations 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

##### 1.2 Explain the requirements for exposure risk assessment and monitoring

IRR maximum exposure limits

Effective use of dosimeters

Reducing exposure risk

Implications to personnel and patients of inaccurate or incorrect exposures

##### 1.3 Summarise requirements for the use of personal protective equipment when dealing with radiation

Protective clothing – aprons, thyroid protectors, gloves

Care

Checking integrity

#### 2 Understand the principles of radiography

##### 2.1 Describe the properties and effects of radiation, to include:

- Function of equipment, to include tube head, light beam diaphragm
- Primary beam and scatter
- Absorption by different materials/tissues

▪ *Effects of kV and mA*

Key terms, properties and effects of radiation used to create diagnostic images  
Basic equipment and its function, including the role of anode and cathode  
Effects of varying kilovoltages (kV) and milliamperage (mA) and their relationship  
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  
Arthrography  
Urinary tract studies

2.2 *Summarise types of image that can be produced using radiation, to include X-rays, scintigraphy and coaxial tomography (CT)*

Self-explanatory  
Role application and images resulting from scintigraphy (nuclear imaging)

2.3 *Explain the features and use of cassettes and grids*

Type and structure of film  
Storage and care of X-ray film, effects of temperature, light, humidity on film emulsions  
Structure and care of cassettes and intensifying screens  
Structure and use of different grid types  
Grid factor and grid ratio  
Labelling methods and protocols  
Methods of storage of images (including computer based) and maintaining the image

2.4 *Summarise the design features and maintenance of a radiography facility, to include equipment*

Darkroom structure and layout  
Protocols, safelights and warnings  
Maintenance, preparation and use of X-ray machines  
Darkroom ventilation  
Structure, function and maintenance of automatic processors. Chemicals used. Disposal of waste

2.5 *Explain how to calculate exposure factors*

Exposure calculations and influencing factors

**3 Know the principles of adjuvant imaging techniques**

3.1 *Summarise how images are produced using ultrasound*

Principles and types of ultrasonic imaging and indications for use  
Image quality  
Range and maintenance of probes and selection for use

To include the following uses:-

Orthopaedics  
Reproduction  
Internal medicine

3.2 *Describe the care and maintenance of ultrasound equipment*

Care of scanner, probes, transducers  
Obtaining ultrasonic images  
Use of conductive fluids, patient care and positioning  
Storing images

- 3.3 *Summarise how images are produced by magnetic resonance*  
Principles of magnetic resonance imaging  
Role and application  
Considerations in relation to magnetic field  
Patient management and monitoring
- 3.4 *Explain the principles of endoscopy and the care, maintenance and storage of equipment*  
Principles of endoscopic examination and indications and implications of use  
Methods of patient positioning and restraint  
Care, management and maintenance of equipment including fibre optics
- 3.5 *Describe requirements for supporting imaging using radioactive isotopes (scintigraphy)*  
Use of radioactive isotopes, licensing of premises  
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
- 4 Understand how to take radiographs**
- 4.1 *Summarise methods of patient restraint for radiographic examination*  
Methods of patient restraint (chemical and manual positioning aids)  
Manual restraint, appropriate use, employee considerations  
Clinical considerations when imaging debilitated patients  
Implications of poor positioning  
Patient care and safety in contrast radiography
- 4.2 *Demonstrate standard radiographic positions and the use of positioning aids, to include views (appropriate to species) of:-*
- *Limbs*
  - *Head*
  - *Spine*
  - *Abdomen*
  - *Thorax*
  - *Pelvis*
- Standard positioning and radiographic views in general practice use  
Positioning nomenclature  
Significance of differing views for diagnostic purposes  
Application and use of positioning aids  
Identification  
Identification of collimation borders and centring points for a range of views  
Placement of cassette and grid
- 5 Know how to process radiographs**
- 5.1 *Explain the principles of wet film processing, to include:*
- *Use, storage and disposal of chemicals*
  - *Function and care of automatic processor*
  - *Recognition of film faults*
- Stages of film development of exposed film:  
Processing chemicals:- functions, use and disposal  
Automatic processor: - function and care  
Processing faults
- 5.2 *Explain the principles of digital imaging*  
Principles of digital imaging, computer processing and the resultant images  
Correct submission details  
Reasons for poor digital image quality

5.3 *Evaluate the diagnostic quality of a processed radiograph*

Terms associated with radiographic quality – density, contrast, sharpness, causes of under/over exposure

Effects of kV and mAs on resulting exposure

Identification of common film faults:-

Contamination on screens

Double exposure

Static electricity

Chemical splashes

Crimp marks

White light exposure

Effects of under/over exposure

Identification of movement and penumbra effect

**Assessment Guidance:**

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit			
<b>Summative assessments:</b>	Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.			
	<b>Type</b>	<b>Weighting</b>	<b>Comments</b>	<b>Assessment criteria</b>
1.	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1-3 2.1-5 3.1-5 4.1 5.1-4
2.	Nursing Progress Log	50%	Work-based progress log	4.2

Unit title:	<b>VN 10 Veterinary nursing support of laboratory diagnostics</b>		
Unit code:	D/601/7286		
Level	3		
Credit value:	5		
Learning outcomes:		Assessment criteria:	
1	Understand the function and use of laboratory equipment	1.1	Describe the requirements for the safe use of laboratory equipment, to include: <ul style="list-style-type: none"> <li>▪ Operation and maintenance</li> <li>▪ Calibration and quality control</li> </ul> In relation to microscopes, analysers, centrifuge, refractometer
2	Understand how to collect and prepare specimens for examination	2.1	Describe equipment and materials required for sample collection, preservation and transport, to include: <ul style="list-style-type: none"> <li>▪ Blood, urine, faeces, secretions, skin, hair and tissue</li> </ul>
		2.2	Explain how to prepare animals for the collection of samples, to include: <ul style="list-style-type: none"> <li>▪ Blood, urine, faeces, secretions, skin and hair</li> </ul>
		2.3	Demonstrate effective and safe sampling techniques, to include: <ul style="list-style-type: none"> <li>▪ Urine</li> <li>▪ Faeces</li> <li>▪ Blood</li> <li>▪ Hair and skin</li> </ul>
3	Know how to test pathological specimens	3.1	Explain how to use commercial test kits effectively
		3.2	Demonstrate how to carry out common test techniques, to include: <ul style="list-style-type: none"> <li>▪ Microscopy</li> <li>▪ Packed cell volume (PCV)</li> <li>▪ Blood smear</li> <li>▪ Test strips</li> <li>▪ Use of analyser</li> <li>▪ Use of refractometer (SG)</li> </ul>
		3.3	Describe how to dispose of surplus pathological material and reagents safely
		3.4	Demonstrate accurate and effective reporting of test results
4	Know how to prepare specimens for transportation	4.1	Explain the requirements for the safe transport of specimens; to include packaging and labelling
		4.2	Describe how to store specimens safely and effectively prior to despatch
Additional information about this unit:			
Unit purpose and aim(s):	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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN12, RVN13, RVN14		
Assessment requirements/guidance in relation to the Register of	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		

Veterinary Nurses	
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	20

### Teaching and learning guidance

#### 1 Understand the function and use of laboratory equipment

##### 1.1 Describe the requirements for the safe use of laboratory equipment, to include:

- Operation and maintenance
- Calibration and quality control

*In relation to microscopes, analysers, centrifuge, refractometer*

Care, maintenance and hygiene management of:-

Microscope

Centrifuge and microhaematocrit tubes

Refractometer

Analysers (referring to manufacturers instructions)

Quality control and standardisation when using analysers

Microscopes:- types, components (to include sub-stage condenser)

Safe and effective use

#### 2 Understand how to collect and prepare specimens for examination

##### 2.1 Describe equipment and materials required for sample collection, preservation and transport, to include:

- Blood, urine, faeces, secretions, skin, hair and tissue

Recognise and select suitable receptacles and preservatives for sample collection

Effects of storage and preserving samples over time

Equipment required for sample collection (blood, hair/skin, urine, faeces, other body fluids and tissue)

##### 2.2 Explain how to prepare animals for the collection of samples, to include:

- Blood, urine, faeces, secretions, skin and hair

Patient checks

Safe moving/handling

Appropriate positioning and restraint

##### 2.3 Demonstrate effective and safe sampling techniques, to include:

- Urine
- Faeces
- Blood
- Hair and skin

Effective sampling techniques for:

- Urine
- Faeces
- Blood
- Hair and skin

Sampling for biochemistry, haematology, bacteriology

Supporting special sampling techniques:--

synovial fluid

fine needle aspirates  
cerebrospinal fluid  
equine tracheal wash

**3 Know how to test pathological specimens**

**3.1** *Explain how to use commercial test kits effectively*

Types of commercial test kit, to include SNAP® and reagent test strips  
Samples required  
Using kit materials and recording results

**3.2** *Demonstrate how to carry out common test techniques, to include:*

- *Microscopy*
- *Packed cell volume (PCV)*
- *Blood smear*
- *Test strips*
- *Use of analyser*
- *Use of refractometer (SG)*

Common laboratory tests:-

Packed cell volume

Blood smear

Tests using haematological and biochemical analysers

Use of test strips

Examination of urine sediment

Use of refractometer

Equine faecal analysis (accuracy and limitations of assessment methods)

Processing haematological samples and urine using centrifuge, microscope and refractometers

Bacteriology and sensitivity testing, recognition of common parasites (commonly encountered microbes and parasites)

Reproductive swabbing in mares – methods and reasons

Referral of samples post abortion

**3.3** *Describe how to dispose of surplus pathological material and reagents safely*

Disposal of reagents, sharps, animal tissue

**3.4** *Demonstrate accurate and effective reporting of test results*

Physiological significance of test results, reporting relevance to colleagues and clients

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

**4 Know how to prepare specimens for transportation**

**4.1** *Explain the requirements for the safe transport of specimens; to include packaging and labelling*

Effective handling of samples:-

Maintaining asepsis in collection of samples

Infection control

Labelling of samples

Despatch to external laboratories

**4.2** *Describe how to store specimens safely and effectively prior to despatch*

Refrigeration, segregation of pathological samples

Sample deterioration, prevention

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Centres should ensure suitable formative assessments accompany this unit		
<b>Summative assessments:</b>		Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.		
	<b>Type</b>	<b>Weighting</b>	<b>Comments</b>	<b>Assessment criteria</b>
1.	MCQ written paper	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1 2.1-2 3.1, 3.3 4.1-2
2.	Nursing Progress Log	50%	Work-based progress log	2.3 3.2, 3.4

Unit title:		VN 11 Supporting veterinary operating theatre practice	
Unit code:		H/601/7287	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand the principles of operating theatre design and use	1.1	Explain the principles of operating theatre design, to include: <ul style="list-style-type: none"> <li>▪ Clean and dirty areas</li> <li>▪ Heating, lighting, ventilation</li> <li>▪ Circulation of personnel and materials</li> </ul>
		1.2	Explain effective operating theatre protocols, to include daily and periodic cleaning of environment, furniture and equipment
		1.3	Explain the principles of planning an operating list
2	Be able to dress and behave appropriately in an operating theatre	2.1	Behave appropriately in an operating theatre, to include: <ul style="list-style-type: none"> <li>▪ Communication</li> <li>▪ Movement</li> <li>▪ Personal hygiene</li> <li>▪ Safety of self and others</li> </ul>
		2.2	Demonstrate effective hand-hygiene, to include hand-washing, use of antiseptic gels and surgical “scrubbing”
		2.3	Prepare and wear operating theatre clothing, to include: <ul style="list-style-type: none"> <li>▪ “Scrubs” and footwear</li> <li>▪ Caps and masks</li> <li>▪ Sterile gowns</li> <li>▪ Sterile gloves</li> </ul>
3	Understand the use of operating theatre furniture and equipment	3.1	Distinguish between essential, non-essential and inappropriate furnishings and equipment within the theatre environment
		3.2	Explain the safe use and care for key operating theatre equipment, to include: <ul style="list-style-type: none"> <li>▪ Lighting</li> <li>▪ Adjustable table and positioning aids</li> <li>▪ Diathermy</li> <li>▪ Suction</li> <li>▪ Tourniquets</li> </ul>
		3.3	Explain the safe use of patient transport systems, to include hoists
4	Understand the principles of instrument care and sterilisation	4.1	Describe the construction and care of common groups of instruments, to include: <ul style="list-style-type: none"> <li>▪ Materials used</li> <li>▪ Care and storage requirements</li> <li>▪ Identifying damage</li> <li>▪ Safe handling</li> </ul>
		4.2	Demonstrate how to clean instruments effectively, to include: <ul style="list-style-type: none"> <li>▪ Hand-cleaning</li> <li>▪ Ultrasonic cleaning</li> </ul>
		4.3	Demonstrate how to pack items for sterilisation, to include: <ul style="list-style-type: none"> <li>▪ Single instruments</li> <li>▪ Instrument sets</li> <li>▪ Drapes and gowns</li> </ul>

5	Be able to assist the operating surgeon as a circulating nurse	5.1 5.2 5.3 5.4	Prepare an animal in the operating theatre, to include positioning and final skin preparation Demonstrate how to assist a surgeon to don sterile clothing and gloves Open and pass sterile materials correctly, to include: <ul style="list-style-type: none"> <li>▪ Handing to a scrubbed operator</li> <li>▪ Onto a sterile field</li> </ul> Demonstrate the application of sterile wound dressings and bandages
6	Understand the management of instruments and materials during a surgical procedure	6.1 6.2 6.3 6.4 6.5 6.6	Identify commonly used instruments and explain their use, to include: <ul style="list-style-type: none"> <li>▪ General surgical</li> <li>▪ Dental</li> <li>▪ Orthopaedic</li> </ul> Identify types of wound closure material and explain their properties and use, to include: <ul style="list-style-type: none"> <li>▪ Sutures</li> <li>▪ Staples</li> <li>▪ Glue</li> </ul> Explain the use of instrument trolleys and Mayo tables, to include layout of instruments Demonstrate safe techniques for handling and passing instruments, to include: <ul style="list-style-type: none"> <li>▪ Passing bladed items</li> <li>▪ Mounting needles</li> <li>▪ Demounting blades</li> </ul> Explain how to keep track of instruments and swabs, to include timing and recording of instrument and swab counts Describe the safe disposal of hazardous materials, to include: <ul style="list-style-type: none"> <li>▪ Sharps</li> <li>▪ Swabs</li> <li>▪ Suction bottle contents</li> <li>▪ Tissue</li> </ul>
7.	Understand the principles of patient care during surgery	7.1 7.2	Summarise observations to be made of an animal during surgery, to include: <ul style="list-style-type: none"> <li>▪ Blood loss</li> <li>▪ Tourniquets</li> <li>▪ Urine output</li> </ul> Explain the routine care requirements of an anaesthetised animal, to include: <ul style="list-style-type: none"> <li>▪ Maintaining temperature</li> <li>▪ Prevention of pressure necrosis</li> <li>▪ Avoidance of joint strain and limb swelling</li> <li>▪ Prevention of corneal ulcers</li> </ul>
Additional information about this unit:			
Unit purpose and aim(s):	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		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN21, RVN22, RVN23, RVN24		

Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

### Teaching and learning guidance

#### 1 Understand the principles of operating theatre design and use

##### 1.1 Explain the principles of operating theatre design, to include:

- Clean and dirty areas
- Heating, lighting, ventilation
- Circulation of personnel and materials

Preparing an environment for surgical procedures:-

Operating theatre design and layout

Clean and dirty areas

Circulation of personnel and equipment between clean and dirty areas

Heating/air conditioning

Lighting (including positioning theatre lights)

Ventilation, anaesthetic scavenging

##### 1.2 Explain effective operating theatre protocols, to include daily and periodic cleaning of environment, furniture and equipment

Principles of cleaning:- protocols for periodic deep cleaning, daily cleaning and damp-dusting, surfaces and equipment

##### 1.3 Explain the principles of planning an operating list

Preferred order of priority for sterile, aseptic, and dirty procedures

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

##### 2.1 Behave appropriately in an operating theatre, to include:

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

Behaviour protocol in theatres:- movement, including in relation to sterile fields and scrubbed personnel

Communication:- avoiding droplet aerosol, use of masks

Personal hygiene:- general cleanliness, jewellery nail varnish, piercings

##### 2.2 Demonstrate effective hand-hygiene, to include hand-washing, use of antiseptic gels and surgical "scrubbing"

Types of skin disinfectants

Scrubbing brushes and towels:- use, disposables

Washing technique (“scrubbing”)  
Gloving techniques (open and closed methods)

2.3 *Prepare and wear operating theatre clothing, to include:*

- *“Scrubs” and footwear*
- *Caps and masks*
- *Sterile gowns*
- *Sterile gloves*

Use of scrubs – special set for operating theatre use, cleanliness of underclothing

Footwear – safety, maintaining cleanliness

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

Types of glove

Movement and posture when “scrubbed”

3 **Understand the use of operating theatre furniture and equipment**

3.1 *Distinguish between essential, non-essential and inappropriate furnishings and equipment within the theatre environment*

Identifying essential equipment

Issues with non-essential items:- dust-traps, venting of autoclaves, generation of unnecessary through traffic in the theatre

3.2 *Explain the safe use and care for key operating theatre equipment, to include:*

- *Lighting*
- *Adjustable table and positioning aids*
- *Diathermy*
- *Suction*
- *Tourniquets*

Use of theatre equipment:-

Adjustable tables

Light sources

Heat pads

Diathermy

Suction

Scope racks

Anaesthetic machine

Cryosurgery equipment

Control boxes and foot pedals

3.3 *Explain the safe use of patient transport systems, to include hoists*

Winches, hoists and transfer equipment including stretchers and trolleys

Safe transfer of patients to and from tables using mechanical aids

4 **Understand the principles of instrument care and sterilisation**

4.1 *Describe the construction and care of common groups of instruments, to include:*

- *Materials used*
- *Care and storage requirements*
- *Identifying damage*
- *Safe handling*

Care of hinges, working surfaces

Commonly used types of:- towel clips, scalpel, dissecting forceps, scissors, artery forceps, retractors, bowel clamps, needle holders

Orthopaedic instrumentation

Ophthalmic instrumentation

Care of tungsten-tipped instruments

Powered instrumentation:- dental equipment, orthopaedic drills

Safe removal and handling of mounted blades and needles

4.2 *Demonstrate how to clean instruments effectively, to include:*

- *Hand-cleaning*
- *Ultrasonic cleaning*

Procedures for cleaning and maintenance

- Cleaning solutions
  - Delicate items
  - Checking function
  - Lubrication, sharpening
- 4.3 *Demonstrate how to pack items for sterilisation, to include:*
- *Single instruments*
  - *Instrument sets*
  - *Drapes and gowns*
- Materials used for drapes and gowns:-  
Anti bacterial fabrics  
Importance of breathability and water impermeability  
Folding and packing techniques  
Instrument wrapping and packing techniques
- 5 **Be able to assist the operating surgeon as a circulating nurse**
- 5.1 *Prepare an animal in the operating theatre, to include positioning and final skin preparation*
- Patient preparation and positioning:-  
Cardiorespiratory factors  
Risk of emesis (equine only: reflux)  
Skin care (pressure and thermal issues)  
Dehiscence of corneal epithelium and exposed mucosae  
Type of procedure  
Use of ties and cradles, sandbags and foam wedges  
Table extensions and attachments  
Esmarch bandage and tourniquet (distal limb surgery)  
Purse string sutures (perineal surgery)
- 5.2 *Demonstrate how to assist a surgeon to don sterile clothing and gloves*
- Self explanatory
- 5.3 *Open and pass sterile materials correctly, to include:*
- *Handing to a scrubbed operator*
  - *Onto a sterile field*
- Avoidance of:- leaning over sterile fields, dust aerosol from torn packs, sliding pack contents over unsterile edges
- 5.4 *Demonstrate the application of sterile wound dressings and bandages*
- Self explanatory
- 6 **Understand the management of instruments and materials during a surgical procedure**
- 6.1 *Identify commonly used instruments and explain their use, to include:*
- *General surgical*
  - *Dental*
  - *Orthopaedic*
- Methodical layout, keeping track of instruments and swabs  
Use of different instruments during procedures e.g. artery forceps, dissecting forceps  
Anticipating needs of surgeon according to stage of procedure  
Assisting with tissue handling and retraction  
Insertion of wound drainage systems
- 6.2 *Identify types of wound closure material and explain their properties and use, to include:*
- *Sutures*
  - *Staples*
  - *Glue*
- Types and properties of suture material:-  
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 (simple, continuous, interrupted, mattress) and the indications for their use

Alternative suture materials and methods:

- Glue
- Staples

6.3 *Explain the use of instrument trolleys and Mayo tables, to include layout of instruments*

Management of instruments and materials during surgical procedures:-

Lay out of instrumentation for surgical procedures

Positioning and use of instrument trolleys and Mayo tables

6.4 *Demonstrate safe techniques for handling and passing instruments, to include:*

- *Passing bladed items*
- *Mounting needles*
- *Demounting blades*

Method of passing surgical instruments

Management of needles and blades

6.5 *Explain how to keep track of instruments and swabs, to include timing and recording of instrument and swab counts*

Self explanatory

6.6 *Describe the safe disposal of hazardous materials, to include:*

- *Sharps*
- *Swabs*
- *Suction bottle contents*
- *Tissue*

Self explanatory

7 **Understand the principles of patient care during surgery**

7.1 *Summarise observations to be made of an animal during surgery, to include:*

- *Urine output*
- *Blood loss*
- *Tourniquets*

Include coordination with anaesthetic monitoring observations

Monitoring of gross drainage and collection of fluids during procedures

7.2 *Explain the routine care requirements of an anaesthetised animal, to include:*

- *Maintaining temperature*
- *Prevention of pressure necrosis*
- *Avoidance of joint strain and limb swelling*
- *Prevention of corneal ulcers*

Nursing measures to achieve above

Removal of purse strings, monitoring aids and temporary intubations

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Centres should ensure suitable formative assessments accompany this unit		
<b>Summative assessments:</b>		Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.		
	<b>Type</b>	<b>Weighting</b>	<b>Comments</b>	<b>Assessment criteria</b>
1.	Award external MCQ exam	50%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	1.1-3 3.1-3 4.1 6.1-3, 6.5-6 7.1-2
2.	Nursing Progress Log	50%	Work-based progress log	2.1-3 4.2-3 5.1-4 6.4

Unit title:		VN 12 Principles of supporting veterinary anaesthesia	
Unit code:		K/601/7288	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand the principles of anaesthesia	1.1 1.2 1.3 1.4 1.5 1.6	Define different methods of anaesthesia Explain anaesthetic terminology, to include minute volume, tidal volume, dead space Explain the physiology of general anaesthesia, to include sedation, muscle relaxation and pain relief Summarise the concept of balanced anaesthesia Explain stages, planes and levels of anaesthesia Calculate fresh gas flow rate according to species, weight and circuit factor
2	Know the function of anaesthetic drugs	2.1	Summarise the function of key groups of anaesthetic drugs, to include: <ul style="list-style-type: none"> <li>▪ Intravenous and gaseous anaesthetics</li> <li>▪ Intramuscular anaesthetics</li> <li>▪ Sedatives</li> <li>▪ Analgesics</li> <li>▪ Muscle relaxants</li> </ul> and give examples for each group
3	Understand the function of anaesthetic equipment	3.1 3.2 3.3 3.4 3.5	Explain the function and maintenance of key parts of an anaesthetic machine Identify, and summarise the use of, anaesthetic breathing systems, to include: <ul style="list-style-type: none"> <li>▪ Re-breathing</li> <li>▪ Non re-breathing</li> </ul> Summarise types of endotracheal tube and describe their use and maintenance Explain the safety checks to be made of anaesthetic equipment, to include <ul style="list-style-type: none"> <li>▪ Endotracheal tubes</li> <li>▪ Breathing systems</li> <li>▪ Anaesthetic machines</li> <li>▪ Pollution control systems</li> <li>▪ Ventilator</li> </ul> Explain the use of monitoring equipment, to include: <ul style="list-style-type: none"> <li>▪ Capnograph</li> <li>▪ Pulse oximeter</li> <li>▪ Electro-cardiograph</li> </ul>
4	Understand anaesthetic preparation and induction	4.1 4.2	Summarise the preparation of an animal for general anaesthesia, to include: <ul style="list-style-type: none"> <li>▪ Pre-anaesthetic checks</li> <li>▪ Fasting</li> <li>▪ Premedication</li> </ul> Summarise the materials and equipment needed for induction of anaesthesia, to include: <ul style="list-style-type: none"> <li>▪ Consumables</li> <li>▪ Drugs and Intravenous fluids</li> <li>▪ Laryngoscope</li> <li>▪ Endotracheal tubes</li> <li>▪ Monitoring equipment</li> </ul>

		4.3	Summarise the support of the anaesthetist during anaesthetic induction, to include: <ul style="list-style-type: none"> <li>▪ restraint and positioning of the animal</li> <li>▪ supply and management of equipment</li> </ul>
		4.4	Explain the principles of effective intubation
5	Understand the principles of monitoring an anaesthetised animal	5.1	Explain the observations to be made of an anaesthetised animal, and how these should be recorded, to include: <ul style="list-style-type: none"> <li>▪ Temperature, pulse, respiration</li> <li>▪ Level of consciousness</li> </ul>
		5.2	Describe the observations to be made of equipment during an anaesthetic, to include: <ul style="list-style-type: none"> <li>▪ Gases and volatile agents</li> <li>▪ Circuits and tube</li> <li>▪ Monitoring equipment</li> </ul>
		5.3	Explain the positioning and monitoring of a patient during anaesthetic recovery, to include extubation, safety
		5.4	Summarise observations to be reported to the veterinary surgeon during anaesthetic and recovery monitoring.
6	Know how to recognise and respond to anaesthetic emergencies	6.1	Explain how to recognise respiratory and cardiac arrest
		6.2	Explain the management of resuscitation, to include airway management, CPR, drugs
		6.3	Describe how to recognise and manage equipment failure, to include power failure
Additional information about this unit:			
Unit purpose and aim(s):	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		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN25, RVN26, RVN27		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

## Teaching and learning guidance

### 1 Understand the principles of anaesthesia

#### 1.1 Define different methods of anaesthesia

Types of anaesthesia/analgesia:-

- General
- Epidural
- Regional
- Local
- Topical

Advantages and disadvantages

Onset and duration of action of commonly used local anaesthetic solutions

Local anaesthetic techniques, to include peri-neural and intra-articular anaesthesia

Sedative drugs/drug combinations available to facilitate the performance of radiography, standing surgical procedures

Use of continuous infusion sedation in equine practice

#### 1.2 Explain anaesthetic terminology, to include minute volume, tidal volume, dead space.

Terminology:-

- Dead space (equipment and physiological)
- Tidal volume and minute volume

#### 1.3 Explain the physiology of general anaesthesia, to include sedation, muscle relaxation and pain relief

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

#### 1.4 Summarise the concept of balanced anaesthesia "triad of anaesthesia"

#### 1.5 Explain stages, planes and levels of anaesthesia Self explanatory

#### 1.6 Calculate fresh gas flow rate according to species, weight and circuit factor

Calculation formulae

Use of calculators and pre-prepared charts

Gross error checks

Significance of circuit factors

### 2 Know the function of anaesthetic drugs

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

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

and give examples in each group

Premedication:

Commonly used agents, including their side effects (ACP, alpha 2 agonists, opioids, benzodiazepines)

Principles of analgesia and the advantages of pre-emptive analgesia (Non steroidal AIDs, opioids & local anaesthetic techniques)

Induction and agents/combinations of agents commonly used, including side effects

Intravenous, inhalation and chamber induction

Maintenance of anaesthesia and methods and agents used for maintaining anaesthesia including their side effects (carrier gases, volatile agents, total intravenous anaesthesia (TIVA) and “top-up” doses

Muscle relaxants in equine practice

### 3 Understand the function of anaesthetic equipment

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

Use and maintenance of equipment for the administration of inhalation anaesthetic agents including:

Identification of key parts of an anaesthetic machine:-

Gas supply (oxygen and nitrous oxide) and emergency flush

Vaporiser

Flow-meters

Oxygen and gas delivery systems:- piped, cylinders

#### 3.2 Identify, and summarise the use of, anaesthetic breathing systems, to include:

- Re-breathing

- Non re-breathing

Advantages and disadvantages of non re-breathing systems:- Gas flow in Lack, Bain, T-piece, Humphrey ADE circuits

Advantages and disadvantages of re-breathing systems. Gas flow in a Circle circuit.

Use of circuit types in small animal and equine practice

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

#### 3.3 Summarise types of endotracheal tube and describe their use and maintenance

Cuffed and uncuffed, disposable and re-sterilisable

Correct placement (breath sounds, chest movement)

Cuff inflation

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

- Endotracheal tubes

- Breathing systems

- Anaesthetic machines

- Pollution control systems

- Ventilator

Tube patency and integrity

Circuits intact and not leaking, APL valve works and open

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

Scavenging – weigh absorber, system connected and working

#### 3.5 Explain the use of monitoring equipment, to include:

- Capnograph

- Pulse oximeter

- Electro-cardiograph

Indications for use, effective use of equipment

### 4 Understand anaesthetic preparation and induction

#### 4.1 Summarise the preparation of a animal for general anaesthesia, to include:

- Pre-anaesthetic checks

- Fasting

- Premedication

Checking admission information and procedures carried out

Principles of pre-medication and drugs in common use

General anaesthetic risks associated with special cases:-

- Toxic patients

- Limb fractures
- Existing conditions
- Age of Patient
- Obesity
- Caesarean section

American Association of Anaesthesiologists anaesthetic risk score

Species-related risks:-

Small animal:

Ruptured diaphragm

Gastric Dilatation and Volvulus (GDV)

Equine:-

Colic and the management of such cases to minimise complications

4.2 *Summarise the materials and equipment needed for induction of anaesthesia, to include:*

- Consumables
- Drugs and Intravenous fluids
- Laryngoscope
- Endotracheal tubes
- Monitoring equipment

Types and use of the above

4.3 *Summarise the support of the anaesthetist during anaesthetic induction, to include:*

- restraint and positioning of the animal
- supply and management of equipment

Raising veins

Intravenous catheter types and the principles of catheter placement

Fixing cannulae, endotracheal tube, circuit

Adjusting gas flow, volatile agent

Securing intravenous lines, indwelling catheters etc

To include ability to respond to anaesthetic emergency

4.4 *Explain the principles of effective intubation*

Correct size of tube

Use of laryngoscope

Identification of epiglottis

Avoidance of laryngeal spasm

Correct inflation of cuff

5 **Understand the principles of monitoring an anaesthetised animal**

5.1 *Explain the observations to be made of an anaesthetised animal, and how these should be recorded, to include:*

- Temperature, pulse, respiration
- Level of consciousness

Frequency of observations

Eye position, muscle tone, reflexes

Pulse oximetry

Electrocardiogram

Blood pressure monitoring

Capnography

Reporting of significant changes

Maintaining anaesthetic record

- 5.2 *Describe the observations to be made of equipment during an anaesthetic, to include:*
- Gases and volatile agents
  - Circuits and tube
  - Monitoring equipment
- Power supply, connections  
 Supply of gases and volatile agents  
 Correlation of equipment read-outs with condition of patient
- 5.3 *Explain the positioning and monitoring of a patient during anaesthetic recovery, to include extubation*
- Recognising when to extubate  
 Laryngeal spasm  
 Effects of patient positioning on respiratory and cardiovascular function
- 5.4 *Summarise observations to be reported to the veterinary surgeon during anaesthetic and recovery monitoring*
- Key observations and changes
- 6 Know how to recognise and respond to anaesthetic emergencies**
- 6.1 *Explain how to recognise respiratory and cardiac arrest*
- Respiratory obstruction  
 Respiratory arrest  
 Cardiac arrest
- 6.2 *Explain the management of resuscitation, to include airway management, CPR, drugs*
- Contents of and use of anaesthetic emergency box  
 Drugs in resuscitation  
 Cardio-pulmonary resuscitation
- 6.3 *Describe how to recognise and manage equipment failure, to include power failure*
- Emergency lighting, manual ventilation, management of surgical procedure

**Assessment Guidance:**

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit			
<b>Summative assessments:</b>	Separate examination of this unit should only be undertaken where a candidate requires individual unit accreditation i.e. is not intending to achieve the level 3 Diploma in Veterinary Nursing.			
	<b>Type</b>	<b>Weighting</b>	<b>Comments</b>	<b>Assessment criteria</b>
1	MCQ written paper	100%	Independently assessed test set by RCVS. This test is normally administered alongside other core unit assessments	All

Unit title:		VN 19 Preparing for professional registration	
Unit code:		M/601/7289	
Level		4	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Know the legal framework for veterinary nursing practice	1.1 1.2	Summarise the UK legal system, to include criminal and civil law, sources of law and mentioning key differences in Scotland Interpret the provisions of the Veterinary Surgeons Act in relation to veterinary nurses, to include <ul style="list-style-type: none"> <li>▪ Meaning of Schedule 3</li> <li>▪ Scope of veterinary nursing practice</li> </ul>
2	Understand the accountability of veterinary nurses	2.1 2.2 2.3 2.4 2.5	Analyse the features of professional status Explain the purpose and principles of professional regulation, to include statutory and voluntary regulation, self versus independent regulation Explain the functions of a professional regulatory body, to include public protection, codes of conduct, investigation of complaints Summarise the RCVS regulatory Bye-laws in relation to veterinary nurses Interpret the RCVS Guide to Professional Conduct for veterinary nurses
3	Understand the application of ethical principles	3.1 3.2 3.3	Summarise ethical schools of thought, to include utilitarianism, deontology and virtue ethics Identify ethical problems arising in veterinary practice Analyse patient care issues using ethical principles
4	Understand the principles of consent to veterinary treatment	4.1 4.2 4.3	Explain the legal requirements for consent to treatment, to include treatment without consent Analyse the features of informed consent Identify potential barriers to informed consent in practice
5	Understand legal and ethical duties to clients, colleagues and animals	5.1 5.2	Explain the principle of Duty of Care in relation to clients, colleagues and animals, to include: <ul style="list-style-type: none"> <li>▪ Animal Welfare Act</li> <li>▪ Negligence</li> <li>▪ Maintaining professional competence</li> <li>▪ Personal scope of competence</li> </ul> Critically analyse ethical issues surrounding the support of colleagues and clients, to include whistleblowing
Additional information about this unit:			
Unit purpose and aim(s):		This unit will assist student veterinary nurses nearing the point of qualification for the RCVS Register to understand and 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 and learn to apply strategies for resolving such conflicts and/or how to seek appropriate expert help.	
Unit expiry date:		31/07/2015	
Relationship with National Occupational Standards:		This relates to the following Veterinary Nursing NOS unit: RVN31	

Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	35

### Teaching and learning guidance

#### 1 Know the legal framework for veterinary nursing practice

##### 1.1 Summarise the UK legal system, to include criminal and civil law, sources of law and mentioning key differences in Scotland

Criminal and civil law, Tort (Delict in Scotland)

Courts

Statute and common law, precedent

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

- Meaning of Schedule 3

- Scope of veterinary nursing practice

Purpose of the Veterinary Surgeons Act

Treatment by non-veterinary surgeons:- Schedule 3, exemption orders

#### 2 Understand the accountability of veterinary nurses

##### 2.1 Analyse the features of professional status

Education, accountability, public regard

History and status of veterinary nursing

##### 2.2 Explain the purpose and principles of professional regulation, to include statutory and voluntary regulation, self versus independent 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 Explain the functions of a professional regulatory body, to include public protection, codes of conduct, investigation of complaints

Maintaining register

Standard-setting:- education, standards of practice, CPD and re-validation

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

Investigation of complaints, disciplinary sanctions

- 2.4      *Summarise the RCVS regulatory Bye-laws in relation to veterinary nurses*  
Education, registration, standards, regulation  
List versus Register  
Limitations of non-statutory regulation
- 2.5      *Interpret the RCVS Guide to Professional Conduct for veterinary nurses*  
Provisions of the *Guide*  
Application to practical situations  
Obtaining help and advice
- 3      Understand the application of ethical principles**
- 3.1      *Summarise ethical schools of thought, to include utilitarianism, deontology and virtue ethics*  
Utilitarian costs and benefits versus moral rights and wrongs  
Examples of major theorists e.g. Bentham, Kant  
Recognising the basis of arguments  
Individual character and conscience – limitations
- 3.2      *Identify ethical problems arising in veterinary practice*  
Potential patient, client and colleague issues  
e.g. Informed consent, economic drivers of treatment, animal abuse, euthanasia, addressing poor practice
- 3.3      *Analyse patient care issues using ethical principles*  
Practical debate using principles in 3.1 and real or supplied problems from veterinary practice  
Resolving dilemmas  
Where to go for help – representative organisations, Vet Helpline
- 4      Understand the principles of consent to veterinary treatment**
- 4.1      *Explain the legal requirements for consent to treatment, to include treatment without consent*  
Express and implied consent, written and verbal, mental competence, giving of information  
Design of consent forms
- 4.2      *Analyse the features of informed consent*  
Information giving versus understanding, how much understanding is sufficient
- 4.3      *Identify potential barriers to informed consent in practice*  
Time, training of staff, emergency situations, unethical practices
- 5      Understand Legal and ethical duties to clients, colleagues and animals**
- 5.1      *Explain the principle of Duty of Care in relation to clients, colleagues and animals, to include:*  
▪ *Animal Welfare Act*  
▪ *Negligence*  
▪ *Maintaining professional competence*  
▪ *Personal scope of competence*  
Animal welfare act, statutory duties to animals  
Duty of care to clients and colleagues, Reasonableness  
Negligence, remedies in law  
Practising within own level of competence, resisting inappropriately delegated work  
Maintaining CPD  
Professional development from “beginner to expert”
- 5.2      *Critically analyse ethical issues surrounding the support of colleagues and clients, to include whistle-blowing*  
Addressing problems, protocols for whistle-blowing, breaching confidentiality in the public interest, where to seek advice and help

**Assessment Guidance:**

**Formative assessments:** Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.

**Summative assessments:**

Type	Weighting	Comments (including word count)	Assessment criteria
Case Study	60%	In accordance with the assessment specification provided	2.5 3.2-3 4.1-3 5.2
Independent (centre-based) examination	40%	In accordance with the assessment specification provided	1.1-2 2.1-5 3.1 4.1-3 5.1

## UNIT VN19 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 2.5      Interpret the RCVS Guide to Professional Conduct for veterinary nurses**
- 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**
- 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**
- 5.1      Explain the principle of Duty of Care in relation to clients, colleagues and animals, to include:**
  - **Animal Welfare Act**
  - **Negligence**
  - **Maintaining professional competence**
  - **Personal scope of competence**
- 5.2      Critically analyse ethical issues surrounding the support of colleagues and clients, to include whistleblowing**

The candidate will explore an ethical issue in depth. This should be an experienced by him/her within a veterinary practice. This incident may, for example, be focussed on:

- Consent to treatment
- Euthanasia of a healthy animal
- Delegation of acts of veterinary surgery
- Addressing unprofessional conduct

Course providers are advised to select an assignment focus for each cohort of students in order to provide a standardised brief for candidates and reduce the possibility of plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- Make reference to, and competently apply, an evidence base to their discussion from key texts and/or supporting literature/materials
- Critically reflect on the issues raised and analyse implications for practice
- Explore ways of improving practice, based on evidence and personal reflection

### **Assignment length**

The Awarding Body-suggested word limit for this assignment is 2,000 words. Course providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

### **Submission**

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

### **Grading**

Candidates must achieve a minimum score of 50% in order to pass

### **Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance

## ROYAL COLLEGE OF VETERINARY SURGEONS

## Level 4 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of theoretical knowledge; inclusion of irrelevant material	Marginal knowledge base; shows little evidence of appropriate application to practice		Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice	Evaluates and reflects upon current knowledge; shows evidence of a resulting change in clinical practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect on issues		Sound understanding of issues. Reflects on issues but is largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills	Demonstrates comprehension of salient issues and consistent evidence of critical discussion		
3	WRITTEN EXPRESSION	Meaning obscured and does not always get to the point	Meaning clear but does not get to the point in the most effective way		Gets to the point and meaning clear	Meaning clear and points are competently illustrated	Meaning clear and fluent, with and articulate style		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Some applied use of relevant supporting literature and materials but little evidence of analysis		Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials	Critical analysis, application and evaluation of appropriate literature/materials		
5	OVERALL ACHIEVEMENT	Poor; no learning outcomes have been achieved	Evidence of superficial achievement in some learning outcomes		Learning outcomes achieved with some marginal aspects	Overall standard above average with some work at an acceptable level	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

## UNIT VN19 SEEN EXAMINATION SPECIFICATION

This assessment must test achievement of the following:-

- 1.1      Summarise the UK legal system, to include criminal and civil law, sources of law and mentioning key differences in Scotland**
- 1.2      Interpret the provisions of the Veterinary Surgeons Act in relation to veterinary nurses, to include**
  - **Meaning of Schedule 3**
  - **Scope of veterinary nursing practice**
- 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, to include public protection, codes of conduct, investigation of complaints**
- 2.4      Summarise the RCVS regulatory Bye-laws in relation to veterinary nurses**
- 2.5      Interpret the RCVS Guide to Professional Conduct for veterinary nurses**
- 5.1      Explain the principle of Duty of Care in relation to clients, colleagues and animals, to include:**
  - **Animal Welfare Act**
  - **Negligence**
  - **Maintaining professional competence**
  - **Personal scope of competence**

Candidates will explore one of a choice of seen topics in depth under invigilated conditions. The period of time available should be one hour, excluding reading time. The aim of this assessment is to test candidates' ability to analyse issues and apply knowledge and understanding rapidly and effectively, as they will have to in clinical practice.

A choice of at least two well-defined areas of focus should be provided a maximum of four weeks in advance of the examination to permit candidates to prepare in depth. Examination questions must be based on these areas and may include a clinical scenario for analysis and discussion. The examination questions themselves must not be disclosed to the candidates in advance of the examination.

Candidates may be asked to provide a list of their supporting reading to accompany their exam paper.

Candidates should:

- produce a satisfactory and coherent response through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- Make reference to, and competently apply, an evidence base to their discussion from key texts and/or supporting literature/materials
- Critically reflect on the issues raised and analyse implications for practice
- Explore ways of improving practice, based on evidence and personal reflection

### **Examination details**

The Awarding Body-suggested examination time is one hour, excluding reading time. A choice of between two and three areas of focus should be provided. The examination should be invigilated. Candidates may be allowed to bring into the examination room copies of key texts and statutes. Such materials must not be annotated or include candidates' personal notes.

This assessment must be completed and marks notified to the Awarding Body before the candidate is entered for the external award OSCE examination.

**Marks and grading**

Candidates must achieve a minimum score of 65% in order to pass.

Marks must be notified to the Awarding Body within four weeks of the date of examination and before the candidate is entered for the final external award examination.

**Quality assurance**

Proposed examination questions and marked scripts must be subject to a process of independent moderation in accordance with Awarding Body guidance.

**Small animal pathway units:**

No	Title	level	credits
SAVN13	Practical monitoring of small animal veterinary anaesthesia	3	10
SAVN14	Principles of peri-operative veterinary nursing support for small animals	3	10
SAVN15	Practical peri-operative veterinary nursing support for small animals	3	5
SAVN16	Principles of veterinary nursing support for small animal patients	3	10
SAVN17	Practical veterinary nursing support of small animal patients	3	5
SAVN18	Principles of small animal veterinary nursing emergency and critical care	3	10
Total SA credits			50

Unit title:	<b>SAVN 13 Practical monitoring of small animal veterinary anaesthesia</b>		
Unit code:	M/601/7728		
Level	3		
Credit value:	10		
Learning outcomes:		Assessment criteria:	
1	Be able to prepare, use and maintain anaesthetic equipment	1.1	Demonstrate the set-up and checks required of anaesthetic equipment, to include <ul style="list-style-type: none"> <li>▪ Endotracheal tubes</li> <li>▪ Circuits</li> <li>▪ Anaesthetic machines</li> <li>▪ Pollution control systems</li> <li>▪ Monitoring equipment</li> </ul>
		1.2	Clean and care for anaesthetic equipment, to include the items set out in 1.1
2	Be able to assist with anaesthetic preparation and induction	2.1	Prepare materials and equipment needed for induction of anaesthesia, to include: <ul style="list-style-type: none"> <li>▪ Consumables</li> <li>▪ Drugs and intravenous fluids</li> <li>▪ Laryngoscope</li> <li>▪ Endotracheal tubes</li> </ul>
		2.2	Support the anaesthetist during anaesthetic induction, to include: <ul style="list-style-type: none"> <li>▪ Restraint and positioning of the animal</li> <li>▪ Supply and management of equipment</li> <li>▪ Adjustment of gas flow and volatile agent</li> </ul>
		2.3	Demonstrate safe and effective intubation technique
		2.4	Transfer an anaesthetised animal safely into the operating theatre
3	Be able to monitor an animal during anaesthesia and recovery	3.1	Observe and monitor an anaesthetised animal, to include: <ul style="list-style-type: none"> <li>▪ Temperature, pulse, respiration</li> <li>▪ Level of consciousness</li> <li>▪ Muscle relaxation</li> </ul>
		3.2	Record observations and make appropriate and accurate reports to the responsible veterinary surgeon
		3.3	Observe equipment during an anaesthetic, to include: <ul style="list-style-type: none"> <li>▪ Gases and volatile agents</li> <li>▪ Circuits and tube</li> <li>▪ Monitoring equipment</li> </ul>
		3.4	Adjust anaesthetic agents accurately according to veterinary instructions
		3.5	Position and monitor a patient during anaesthetic recovery, to include disconnection from anaesthetic equipment and extubation
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates practical competence in the support and monitoring of veterinary anaesthesia. It is intended to support individuals working in veterinary practice and who are working towards professional registration as a veterinary nurse.		
Unit expiry date:	31/07/2015		

Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN25, RVN26, RVN27
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

### Teaching and learning guidance

This unit concerns the learning of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

### Assessment Guidance:

**Formative assessments:** Centres should ensure suitable formative assessments accompany this unit

**Summative assessments:**

	Type	Weighting	Comments	Assessment criteria:
1.	Nursing Progress Log	100%	Work-based progress log	All

Unit title:		<b>SAVN 14 Principles of peri-operative veterinary nursing support for small animals</b>	
Unit code:		T/601/7729	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand how to prepare a patient for surgery	1.1	Explain the information to be obtained from the animal's owner, to include starvation, normal routine, contact details
		1.2	Summarise the legal requirements for consent to a surgical procedure, to include fee estimate, explanation, signature
		1.3	Explain the principles of withholding food and fluids prior to anaesthesia
		1.4	Describe requirements for clipping and skin preparation, to include: <ul style="list-style-type: none"> <li>▪ Care and use of clippers</li> <li>▪ Identification of site</li> <li>▪ First skin scrub</li> <li>▪ Foot bandage</li> </ul>
2	Understand the requirements for immediate post-operative care	2.1	Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, observations at handover, treatment instructions
		2.2	Interpret post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage
		2.3	Explain the physiology, recognition and management of post-operative shock
		2.4	Explain how post-operative fluid balance is maintained, to include: <ul style="list-style-type: none"> <li>▪ altered intake/output</li> <li>▪ calculating fluid requirements</li> <li>▪ maintaining intravenous infusion</li> </ul>
		2.5	Summarise the principles of effective post-operative pain management
3	Understand nursing requirements of the convalescent patient	3.1	Explain core nursing requirements during post-operative convalescence, to include: <ul style="list-style-type: none"> <li>▪ fluid and nutrition</li> <li>▪ elimination</li> <li>▪ mobility, exercise</li> <li>▪ pain relief, alleviation of stress</li> <li>▪ wound management</li> </ul>
		3.2	Describe the principles of surgical wound care, to include: <ul style="list-style-type: none"> <li>▪ appearance of haematoma, infection</li> <li>▪ drains</li> <li>▪ dressing and bandaging</li> <li>▪ removal of drains, closures</li> <li>▪ preventing interference</li> </ul>
4	Know species-specific nursing requirements for patients before and following specific procedures	4.1	Summarise the species-specific peri-operative nursing requirements of patients, mentioning cats, dogs and exotics, to include: <ul style="list-style-type: none"> <li>▪ minor surgery</li> <li>▪ abdominal procedures</li> <li>▪ orthopaedic procedures</li> </ul>

5	Understand how to facilitate home convalescence	5.1 5.2 5.3	Analyse the factors to consider when planning for discharge, to include condition of the patient and home circumstances Explain the core requirements for a home care plan Analyse the requirements for effective discharge handover to an owner
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates an understanding of peri-operative nursing care principles relating to small animals 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN14		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

### Teaching and learning guidance

- 1 **Understand how to prepare a patient for surgery**
  - 1.1 *Explain the information to be obtained from the animal's owner, to include starvation, normal routine, contact details*  
Reason for admission  
Contact details, animal's normal routine, including feeding and exercise  
Period of starvation  
General condition, any change since last consultation  
Consent  
Contact point and time to call given to owner
  - 1.2 *Summarise the legal requirements for consent to a surgical procedure, to include fee estimate, explanation, signature*  
Legal requirements for consent to treatment  
Contrast with concept of informed consent
  - 1.3 *Explain the principles of withholding food and fluids prior to anaesthesia*  
Risk of regurgitation  
Pulmonary acid aspiration syndrome  
Varying period of withholding in special cases e.g. geriatric animals

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

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

Aims of skin preparation, techniques and procedures:-

Identification and marking of surgical site

Restraint and handling

Clippers

Skin disinfectants/antiseptics

Swabbing technique

2 **Understand the requirements for immediate post-operative care**

2.1 Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, observations at handover, treatment instructions

Preparation of suitable recovery accommodation

Transition from anaesthetic recovery to ward

Handover observations e.g. airway, level of consciousness, vital signs, wound, drainage

Importance of communication and record keeping

2.2 Interpret post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage

Common post operative complications

Preventative measures

Nursing management

Immediate post-operative care:-

Post-operative positioning and its influence on circulation and breathing

Pain monitoring

Monitoring – vital signs, wound, casts

2.3 Explain the physiology, recognition and management of post-operative shock

Types of shock – cardiogenic, hypovolaemic, distributive

Physiology of hypovolaemic shock, compensatory mechanisms

Signs of shock

Arrest of haemorrhage

Fluid replacement

Complications

2.4 Explain how post-operative fluid balance is maintained, to include:

- altered intake/output,
- calculating fluid requirements,
- maintaining intravenous infusion

Reasons for perioperative altered fluid balance

Calculation formulae

Gravity feed infusions and infusion pumps

Venous spasm, dealing safely with stopped infusion

Recognising extravasation

2.5 Summarise the principles of effective post-operative pain management

Pain relief:-

Analgesics commonly used peri and intra- operatively

Monitoring effective pain relief (physiological signs of pain)

Epidural analgesia, local/regional blocks

3 **Understand nursing requirements of the convalescent patient**

3.1 Explain core nursing requirements during post-operative convalescence, to include:

- fluid and nutrition

- *elimination*
- *mobility, exercise*
- *pain relief, alleviation of stress*
- *wound management*

Self-explanatory

Evaluation of the above, taking into account species, specific condition, age and general fitness

3.2 *Describe the principles of surgical wound care, to include:*

- *appearance of haematoma, infection*
- *drains*
- *dressing and bandaging*
- *removal of drains, closures*
- *preventing interference*

Haematoma and bruising

Differentiation of normal inflammation and infection

Purpose, types and management of wound drainage

Dressing types and their application, to include major groups of interactive dressings

Aseptic dressing technique

Purposes of bandaging (dressing retention/pressure/support) and techniques

Casting materials and application/removal of casts

Suture removal – principles for different suture types, staples

Use of Elizabethan collars etc

**4 Know species-specific nursing requirements for patients before and following specific procedures**

4.1 *Summarise the species-specific peri-operative nursing requirements of patients, mentioning cats, dogs and exotics, to include:*

- *minor surgery*
- *abdominal procedures*
- *orthopaedic procedures*

Self-explanatory

Include specific nursing requirements of range of common minor and major procedures seen in general veterinary practice

Special requirements for nursing following spinal, ophthalmic and thoracic procedures

**5 Understand how to facilitate home convalescence**

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

Importance of client concordance in the management of a patient within the home environment

The veterinary nurse's role in assisting clients whose pets require:-

Changes to their daily routine

Adaptations to the home environment

The administration of simple physiotherapy techniques

The observation and recording of clinical signs

The administration of drugs

5.2 *Explain the core requirements for a home care plan*

The design of after care sheets using the principles developed within nursing care, taking into account:

Activity and exercise

Feeding

Elimination

Care of wounds, bandages, collars

Administration of medication

Recognising complications

Seeking assistance and advice

Incorporation of the results of diagnostic tests, and their implications, into the design of nursing care plans

5.3 *Analyse the requirements for effective discharge handover to an owner*

- Importance of assessing needs of owner before providing care plan:-
- Understanding and engagement
- Ability to provide care, suitable home environment
- Economic situation
- Effective communication

**Assessment Guidance:**

**Formative assessments:** Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.

**Summative assessments:**

Type	Weighting	Comments (including word count)	Assessment criteria
Case Study series	100%	In accordance with assessment specification guidance provided	All

## UNIT SAVN14 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 1.1 Explain the information to be obtained from the animal's owner, to include starvation, normal routine, contact details
- 1.2 Summarise the legal requirements for consent to a surgical procedure, to include fee estimate, explanation, signature
- 1.3 Explain the principles of withholding food and fluids prior to anaesthesia
- 1.4 Describe requirements for clipping and skin preparation, to include:
  - Care and use of clippers
  - Identification of site
  - First skin scrub
  - Foot bandage
- 2.1 Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, observations at handover, treatment instructions
- 2.2 Interpret post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage
- 2.3 Explain the physiology, recognition and management of post-operative shock
- 2.4 Explain how post-operative fluid balance is maintained, to include:
  - altered intake/output,
  - calculating fluid requirements,
  - maintaining intravenous infusion
- 2.5 Summarise the principles of effective post-operative pain management
- 3.1 Explain core nursing requirements during post-operative convalescence, to include:
  - fluid and nutrition
  - elimination
  - mobility, exercise
  - pain relief, alleviation of stress
  - wound management
- 3.2 Describe the principles of surgical wound care, to include:
  - appearance of haematoma, infection
  - drains
  - dressing and bandaging
  - removal of drains, closures
  - preventing interference
- 4.1 Summarise the species-specific peri-operative nursing requirements of patients, mentioning cats, dogs and exotics, to include:
  - minor surgery
  - abdominal procedures
  - orthopaedic procedures
- 5.1 Analyse the factors to consider when planning for discharge, to include condition of the patient and home circumstances
- 5.2 Explain the core requirements for a home care plan
- 5.3 Analyse the requirements for effective discharge handover to an owner

The candidate will explore the dynamics of perioperative nursing support through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Four case studies should be provided, covering minor, abdominal and orthopaedic peri-operative care and both planned and emergency surgery. A range of species should be addressed. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- Critically reflect on the issues raised and identify implications for the development of their nursing practice

### Assignment length

The Awarding Body-suggested maximum word limit for this assignment is 5,000 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

### Case study framework

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	Patient information and identifier
	Species, breed, age, weight/size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student's practice
2.	Veterinary diagnosis and treatment
	<u>Overview</u> and <u>concise</u> explanation of:- <ul style="list-style-type: none"> <li>▫ Pathology</li> <li>▫ Diagnostic process</li> <li>▫ Anaesthetic</li> <li>▫ Surgical procedure</li> <li>▫ Post-operative treatment and follow - up</li> </ul>
3.	Nursing needs
	Using a model of nursing, identification of the patient's requirements for nursing care <ul style="list-style-type: none"> <li>▫ Taking into account pathology, age, species, owner factors</li> <li>▫ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▫ Pre-operative care and preparation</li> <li>▫ Immediate post-operative recovery and care</li> <li>▫ In-patient care</li> <li>▫ Hand-over to owner and discharge</li> </ul>
4.	Nursing treatments
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physical therapy, assisted feeding, given by the student Include radiography and diagnostic tests if appropriate
5.	Discussion
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	References and bibliography
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	Appendices
	Copy of patient's <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

### Submission

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the final external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of the available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

### Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

Unit title:		<b>SAVN 15 Practical peri-operative veterinary nursing support for small animals</b>	
Unit code:		K/601/7730	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Be able to prepare a patient for surgery	1.1	Admit animals for surgery, to include <ul style="list-style-type: none"> <li>▪ Handover from owner</li> <li>▪ Checking consent</li> <li>▪ Recording contact details</li> <li>▪ Create nursing record</li> </ul>
		1.2	Prepare operation sites, to include: <ul style="list-style-type: none"> <li>▪ Care and use of clippers</li> <li>▪ Identification of site</li> <li>▪ First skin scrub</li> <li>▪ Foot bandaging</li> </ul>
2	Provide immediate post-operative care	2.1	Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, observations at handover, treatment instructions
		2.2	Prepare a suitable nursing environment for a post-operative patient, taking into account species, condition and procedure
		2.3	Record post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage, and respond appropriately
		2.4	Maintain and record fluid intake, to include intravenous fluids and oral intake
		2.5	Recognise pain and stress and take appropriate measures to reduce these, to include positioning, environment and analgesics
3	Deliver nursing requirements of the convalescent patient	3.1	Plan, implement and evaluate care plans to address core nursing requirements during post-operative convalescence, to include: <ul style="list-style-type: none"> <li>▪ fluid and nutrition</li> <li>▪ elimination</li> <li>▪ mobility, exercise</li> <li>▪ pain relief, alleviation of stress</li> <li>▪ wound management</li> </ul>
		3.2	Care for surgical wounds to include: <ul style="list-style-type: none"> <li>▪ observation</li> <li>▪ management of drainage</li> <li>▪ dressing and bandaging</li> <li>▪ removal of drains, closures</li> <li>▪ preventing interference</li> </ul>
4	Provide species-specific nursing for patients before and following specific procedures	4.1	Deliver species-specific peri-operative nursing care to patients, including cats, dogs and exotics, to include: <ul style="list-style-type: none"> <li>▪ minor surgery</li> <li>▪ abdominal procedures</li> <li>▪ orthopaedic procedures</li> </ul>
5	Be able to facilitate home convalescence	5.1	Demonstrate effective care planning for discharge, to include condition of the patient and home circumstances
		5.2	Demonstrate effective communication with patients' owners, to include oral and written guidance, teaching of practical techniques (to

	include medication)
Additional information about this unit:	
Unit purpose and aim(s):	This unit develops practical peri-operative nursing care skills relating to small animals 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.
Unit expiry date:	31/07/2015
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN11, RVN15, RVN28
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	20

### Teaching and learning guidance

This unit concerns the learning of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

### Assessment Guidance:

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit
<b>Summative assessments:</b>	

	Type	Weighting	Comments	Assessment criteria:
	Nursing Progress Log	100%	Work-based progress log	All

Unit title:		<b>SAVN 16 Principles of veterinary nursing support for small animal patients</b>	
Unit code:		T/601/7732	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand how pathology affects the normal function of an animal	1.1	Describe the pathology of a range of commonly encountered medical disorders, to include: <ul style="list-style-type: none"> <li>▪ Circulatory disorders</li> <li>▪ Respiratory disorders</li> <li>▪ Urinary tract disorders</li> <li>▪ Endocrine disorders</li> <li>▪ Neurological disorders</li> <li>▪ Alimentary tract disorders</li> <li>▪ Reproductive tract disorders</li> <li>▪ Musculoskeletal disorders</li> <li>▪ Disorders of the sense organs</li> </ul>
		1.2	Explain the effects of pathophysiological states and common pathologies on the normal function of an animal, to include: <ul style="list-style-type: none"> <li>▪ Sensory impairment</li> <li>▪ Behaviour</li> <li>▪ Reduced mobility</li> <li>▪ Impaired nutrition</li> <li>▪ Metabolic disturbance</li> </ul>
		1.3	Recognise the significance of abnormal diagnostic test results and the impact of these on nursing requirements
2	Understand how to plan and deliver care for animals with a range of commonly encountered conditions	2.1	Evaluate models and frameworks of nursing, to include the Roper, Logan and Tierney (Activities of Living) model and the Orem (Self Care) model, in the veterinary nursing context
		2.2	Apply appropriate models or frameworks to assess animals, plan, implement and evaluate nursing care
		2.3	Demonstrate the application of an evidence base to care planning and delivery
3	Understand the principles of wound healing and care	3.1	Explain the process of wound healing, to include healing by first intention and delayed healing
		3.2	Summarise factors that may impede healing, to include: poor perfusion, poor nutrition, infection, patient or client interference
		3.3	Explain the principles of management for chronic wounds, to include moist healing
		3.4	Appraise the use of different dressing materials in the veterinary situation, to include traditional materials, interactive dressings
4	Understand the principles of isolation nursing	4.1	Explain reasons for isolation nursing, to include infection and compromised immunity
		4.2	Explain the requirements for isolation accommodation, to include design and preparation for an admission
		4.3	Summarise required conduct of staff in relation to isolated cases, to include: <ul style="list-style-type: none"> <li>▪ Protective clothing and hand hygiene</li> </ul>

		4.4	<ul style="list-style-type: none"> <li>▪ Fomites</li> <li>▪ Access to isolation accommodation</li> </ul> <p>Explain the special needs of isolated patients, to include reduction of stress, company</p>
5	Understand how to facilitate effective home and follow-up care for animals with long-term illness	5.1 5.2 5.3	<p>5.1 Explain the importance of client concordance in the home management of a patient and identify factors that may inhibit this</p> <p>5.2 Evaluate strategies for maintaining and improving client concordance with home care plans</p> <p>5.3 Explain the value of nursing follow-up clinics in support of chronic animal health problems, to include:</p> <ul style="list-style-type: none"> <li>▪ Role of the veterinary team in long term care</li> <li>▪ Requirements for an effective nursing clinic</li> <li>▪ Role and remit of the veterinary nurse in consultations</li> </ul>
6	Understand how to support a client through grief and loss	6.1 6.2 6.3 6.4	<p>6.1 Explain the psychological processes of loss and grieving and summarise how these may impact on communication with a client</p> <p>6.2 Evaluate the nurse's role in breaking bad news to clients</p> <p>6.3 Explain how sensitive euthanasia can be accomplished within a busy veterinary practice</p> <p>6.4 Evaluate services available to assist clients to cope with loss</p>

## Additional information about this unit:

Unit purpose and aim(s):	This unit facilitates an understanding of the complex nursing of sick small animals 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
Unit expiry date:	31/07/2015
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: RVN15
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

**Teaching and learning guidance****1 Understand how pathology affects the normal function of an animal**

1.1 Describe the pathology of a range 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*

To include degenerative, infective and neoplastic conditions commonly encountered in general practice

Presentation, diagnosis and veterinary treatment

1.2 *Explain the effects of pathophysiological states and common pathologies on the normal function of an animal, to include:*

- *Sensory impairment*
- *Behaviour*
- *Reduced mobility*
- *Impaired nutrition*
- *Metabolic disturbance*

Links to outcome 1.1. Identification of the potential nursing requirements of animals with medical disorders

Taking into account life-stage and general condition

1.3 *Recognise the significance of abnormal diagnostic test results and the impact of these on nursing requirements*

Normal parameters, abnormalities

Diagnostic tests to include:

Body fluids

Blood tests

Urine tests

Trans-cellular fluid (cerebrospinal fluid and synovial fluid )

**2 Understand how to plan and deliver care for animals with a range of commonly encountered conditions**

2.1 *Evaluate models and frameworks of nursing, to include the Roper, Logan and Tierney (Activities of Living) model and the Orem (Self Care) model, in the veterinary nursing context*

Suitability of established "human" nursing models to the veterinary situation

Interpretation and adaptation of models

Including psychological and social factors in care planning

2.2 *Apply appropriate models or frameworks to assess animals, 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

Muscular-skeletal disorders

Disorders of the sense organs

Application of nursing techniques:-

Assisted feeding, tube feeding

Parenteral feeding

Urinary catheter management and care

- Enemata
- Fluid therapy and intravenous catheter care
- Drug therapy, including the administration of cytotoxic treatment
- Physiotherapy
- Complementary therapies
  
- 2.3 *Demonstrate the application of an evidence base to care planning and delivery*
  - Sources of information to support nursing practice
  - Evidence-based versus tradition/common practice
  - Reading and evaluating literature
  - Critical analysis
  
- 3 **Understand the principles of wound healing and care**
- 3.1 *Explain the process of wound healing, to include healing by first intention and delayed healing*
  - Physiology of healing
  - 1st intention, 2<sup>nd</sup> intention, delayed primary suture
  - Recognising stages of healing
  - Granulation tissue
  
  - Nutrition and wound healing
  
- 3.2 *Summarise factors that may impede healing, to include: poor perfusion, poor nutrition, infection, patient or client interference*
  - Self explanatory
  
- 3.3 *Explain the principles of management for chronic wounds, to include moist healing*
  - Factors that delay healing, effects of moisture, temperature
  - Debridement – chemical and surgical
  - Use of cleansing solutions, effect on healing
  - Recognising colonisation and infection
  - Indications for antibiotic therapy
  - Use of interactive dressings
  
- 3.4 *Appraise the use of different dressing materials in the veterinary situation, to include traditional materials, interactive dressings*
  - Functions of a wound dressing
  - Properties of an ideal dressing
  - Dressing types and their application, to include major groups of interactive dressings
  - Removal and disposal of soiled dressings
  
- 4 **Understand the principles of isolation nursing**
- 4.1 *Explain reasons for isolation nursing, to include infection and compromised immunity*
  - Define isolation, quarantine and “barrier” nursing
  - Reasons for patient isolation
  - Common infections, to include incubation periods and presentation
- 4.2 *Explain the 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
  
  - Condition of patient – barrier or reverse barrier nursing, presence of diarrhoea, vomiting, infected lesions, recumbent or mobile
  
  - Bedding materials, use of disposables, placement of waste bins, gloves, aprons, footwear
  
- 4.3 *Summarise required conduct of staff in relation to isolated cases, to include:*
  - *Protective clothing and hand hygiene*
  - *Fomites*
  - *Access to isolation accommodation*
  - 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) patient toys, bedding  
Access by essential staff, avoiding unnecessary traffic/contact  
Educating lay staff and owner
- 4.4 *Explain the special needs of isolated patients, to include reduction of stress, company*  
Self-explanatory
- 5 **Understand how to facilitate effective home and follow-up care for animals with long-term illness**
- 5.1 *Explain the importance of client concordance in the home management of a patient and identify factors that may inhibit this*  
Importance of assessing needs of owner before providing home care plan:-  
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
- 5.2 Evaluate strategies for maintaining and improving client concordance with home care plans  
Frequency of follow-up  
Points of contact; named nurse or vet  
Nursing clinics  
Achievable goals, compromises
- 5.3 Explain the value of nursing follow-up clinics in support of chronic animal health problems, to include:  
  - Role of the veterinary team in long term care
  - Requirements for an effective nursing clinic
  - Role and remit of the veterinary nurse in consultationsImproving client concordance, providing client support, improving quality of life  
  
Clinic aims, costing and budget, parameters  
  
Consultation protocols, clear guidance for veterinary referral
- 6 **Understand how to support a client through grief and loss**
- 6.1 *Explain the psychological processes of loss and grieving and summarise how these may impact on communication with a client*  
Grieving process, stages of grieving, anger as a natural reaction to loss
- 6.2 *Evaluate the nurse's role in breaking bad news to clients*  
Relationship with client, time, training  
Ongoing support – bereavement counselling
- 6.3 *Explain how sensitive euthanasia can be accomplished within a busy veterinary practice*  
Preparing clients, timing of appointment, special entrance and exit for clients, layout of consulting room, handling of animal, support of clients  
  
Unexpected euthanasia – breaking bad news  
  
Dealing with cadaver, billing for euthanasia
- 6.4 *Evaluate services available to assist clients to cope with loss*  
Pet bereavement counselling  
Pet crematoria

<b>Formative assessments:</b>	Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.			
<b>Summative assessments:</b>				
	<b>Type</b>	<b>Weighting</b>	<b>Comments (including word count)</b>	<b>Assessment criteria</b>
	Case Study series	50%	In accordance with assessment specification guidance provided	2.1-2.3 5.1-5.3
<b>And</b>				
	Independent (centre-based) examination	50%	In accordance with assessment specification guidance provided	1.1-1.3 3.1-3.4 4.1-4.4 6.1-6.4

## UNIT SAVN16 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 2.1 Evaluate models and frameworks of nursing, to include the Roper, Logan and Tierney (Activities of Living) model and the Orem (Self Care) model, in the veterinary nursing context**
- 2.2 Apply appropriate models or frameworks to assess animals, plan, implement and evaluate nursing care**
- 2.3 Demonstrate the application of an evidence base to care planning and delivery**
- 5.1 Explain the importance of client concordance in the home management of a patient and identify factors that may inhibit this**
- 5.2 Evaluate strategies for maintaining and improving client concordance with home care plans**
- 5.3 Explain the value of nursing follow-up clinics in support of chronic animal health problems, to include:**
  - **Role of the veterinary team in long term care**
  - **Requirements for an effective nursing clinic**
  - **Role and remit of the veterinary nurse in consultations**
- 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**

The candidate will explore the dynamics of nursing support for sick animals through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Three studies should be provided, covering a diverse range of medical care that should include the nursing support of in infective case, chronic illness and terminal illness. A range of species should be addressed. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- reflect on the application of their chosen (or practice-imposed) nursing model
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- critically reflect on the issues raised and identify implications for the development of their nursing practice

### **Assignment length**

The Awarding Body-suggested *maximum* word limit for this assignment is 3,500 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

**Case study framework**

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	<b>Patient information and identifier</b>
	Species, breed, age, weight/size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student's practice
2.	<b>Veterinary diagnosis and treatment</b>
	<u>Overview and concise explanation of:-</u> <ul style="list-style-type: none"> <li>▪ Pathology</li> <li>▪ Diagnostic process</li> <li>▪ Medical treatment</li> <li>▪ Follow-up</li> </ul>
3.	<b>Nursing needs</b>
	Using a model of nursing, identification of the patient's requirements for nursing care <ul style="list-style-type: none"> <li>▪ Taking into account pathology, age, species, owner factors</li> <li>▪ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▪ In-patient care</li> <li>▪ Hand-over to owner and discharge</li> <li>▪ Ongoing owner support and education</li> <li>▪ Support during euthanasia (if appropriate)</li> </ul>
4.	<b>Nursing treatments</b>
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physiotherapy, assisted feeding, given by the student Include radiography and diagnostic tests if appropriate
5.	<b>Discussion</b>
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	<b>References and bibliography</b>
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	<b>Appendices</b>
	Copy of patient's <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

**Submission**

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of the available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

### Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

## UNIT SAVN 16 UNSEEN EXAMINATION SPECIFICATION

This assessment must test achievement of the following:-

- 1.1 Describe the pathology of a range 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
  
- 1.2 Explain the effects of pathophysiological states and common pathologies on the normal function of an animal, to include:**
  - Sensory impairment
  - Behaviour
  - Reduced mobility
  - Impaired nutrition
  - Metabolic disturbance
  
- 1.3 Recognise the significance of abnormal diagnostic test results and the impact of these on nursing requirements**
  
- 3.1 Explain the process of wound healing, to include healing by first intention and delayed healing**
  
- 3.2 Summarise factors that may impede healing, to include: poor perfusion, poor nutrition, infection, patient or client interference**
  
- 3.3 Explain the principles of management for chronic wounds, to include moist healing**
  
- 3.4 Appraise the use of different dressing materials in the veterinary situation, to include traditional materials, interactive dressings**
  
- 4.1 Explain reasons for isolation nursing, to include infection and compromised immunity**
  
- 4.2 Explain the requirements for isolation accommodation, to include design and preparation for an admission**
  
- 4.3 Summarise required conduct of staff in relation to isolated cases, to include:**
  - Protective clothing and hand hygiene
  - Fomites
  - Access to isolation accommodation
  -
  
- 4.4 Explain the special needs of isolated patients, to include reduction of stress, company**

The above assessment criteria will be tested under examination conditions via an unseen paper. The period of time available should be 90 minutes, excluding reading time. The aim of this assessment is to test candidates' ability to apply a wide range of knowledge and understanding in the delivery of nursing.

Candidates should:

- produce satisfactory and coherent responses through the implicit use of a range of study skills and strategies
- demonstrate a sound grasp of the knowledge and understanding required to underpin medical nursing practice
- demonstrate that they are able to apply theory to practice

**Examination details**

A mix of simple MCQ and/or short answer (approx 50 – 150 words) questions and “scenario” questions (setting out a hypothetical case on which MCQ or short answer questions are based) are recommended in order to test the range of criteria.

The examination may be divided into sections of question type and a mix of compulsory and optional questions may be included. No compensation between sections should be allowed. The examination must be unseen and invigilated.

**Marks and grading**

Candidates must achieve a minimum score of 65% of the available marks in order to pass. Marks must notified to the Awarding Body within four weeks of the date of examination and before the candidate is entered for the final external award OSCE examination.

**Quality assurance**

Proposed examination questions and marked scripts must be subject to a process of independent moderation in accordance with Awarding Body guidance.

Unit title:		SAVN 17 Practical veterinary nursing support of small animal patients	
Unit code:		R/601/7737	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Be able to provide care for animals with a range of commonly encountered conditions	1.1 1.2 1.3	Plan, deliver and evaluate care for animals with a range of conditions, using an appropriate model or framework Provide an appropriate nursing environment, taking into account the patient's species, age condition and normal routines Demonstrate effective communication with the veterinary team in relation to the evaluation and review of nursing care
2	Be able to perform a range of complex nursing techniques in support of sick animals	2.1 2.2 2.3 2.4 2.5 2.6	Demonstrate effective wound management techniques, to include <ul style="list-style-type: none"> <li>▪ Accurate assessment</li> <li>▪ Taking swabs</li> <li>▪ Irrigation</li> <li>▪ Selection and application of dressings and retentive bandages</li> <li>▪ Client education</li> </ul> Administer complex medications, to include <ul style="list-style-type: none"> <li>▪ Infused medications</li> <li>▪ Intravenous bolus medications</li> </ul> Place and manage feeding tubes Manage indwelling urinary catheters, to include: <ul style="list-style-type: none"> <li>▪ Placement of, and assistance with the placement of, urinary catheters</li> <li>▪ Catheter care</li> </ul> Manage bowel function, to include <ul style="list-style-type: none"> <li>▪ Administration of aperients</li> <li>▪ Enemata</li> </ul> Demonstrate physiotherapy techniques, to include: <ul style="list-style-type: none"> <li>▪ Thoracic coupage</li> <li>▪ Passive limb exercises</li> <li>▪ Active exercise</li> </ul>
3	Be able to provide nursing care to patients requiring isolation	3.1 3.2 3.3 3.4	Prepare isolation accommodation for an admission Limit the transfer of micro-organisms through:- <ul style="list-style-type: none"> <li>▪ Effective hand hygiene</li> <li>▪ Protective clothing</li> <li>▪ Recognising and managing fomites</li> <li>▪ Restricting access to isolation accommodation</li> </ul> Address the special needs of isolated patients, to include reduction of stress, company Clean isolation accommodation:- <ul style="list-style-type: none"> <li>▪ Daily cleaning regime</li> <li>▪ Terminal disinfection</li> </ul>
4	Be able to provide appropriate home plans for chronically sick animals	4.1 4.2	Demonstrate effective care planning for discharge, to include condition of the patient and home circumstances Demonstrate effective communication with patients' owners, to include oral and written guidance, teaching of practical techniques (to include medication)

5	Be able to participate in a veterinary nursing clinic	5.1 5.2	Identify suitable candidates for a nursing clinic in consultation with the veterinary surgeon Conduct effective consultations, to include: <ul style="list-style-type: none"> <li>▪ History taking</li> <li>▪ Appropriate examination</li> <li>▪ Identifying cases for referral to the veterinary surgeon</li> <li>▪ Conduct of treatments</li> <li>▪ Communication with clients</li> <li>▪ Record-keeping</li> </ul>
Additional information about this unit:			
Unit purpose and aim(s):		This unit facilitates the acquisition of practical skills in the complex nursing of sick small animals 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	
Unit expiry date:		31/07/2015	
Relationship with National Occupational Standards:		This relates to the following Veterinary Nursing NOS unit: RVN15	
Assessment requirements/guidance in relation to the Register of Veterinary Nurses		This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.	
Support for the unit by Sector Skills Council		This unit is supported by Lantra	
Location of the unit within the subject/sector classification system:		Animal Care and Veterinary Science	
Name of submitting organisation:		Royal College of Veterinary Surgeons Awarding Body	
Availability for use:		Shared	
Unit available from:		1 August 2010	
Unit guided learning hours:		20	

### Teaching and learning guidance

This unit concerns the learning of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Centres should ensure suitable formative assessments accompany this unit		
<b>Summative assessments:</b>				
	<b>Type</b>	<b>Weighting</b>	<b>Comments</b>	<b>Assessment criteria:</b>
	Nursing Progress Log	100%	Work-based progress log	All

Unit title:		<b>SAVN 18 Principles of small animal veterinary nursing emergency and critical care</b>	
Unit code:		H/601/7743	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand the principles of small animal first aid	1.1	Define the scope of first aid, mentioning legal entitlement to provide first aid to animals
		1.2	Explain the principles of first aid management and treatment, to include <ul style="list-style-type: none"> <li>▪ Safety of self and others</li> <li>▪ Models of casualty assessment</li> <li>▪ Safe methods of movement</li> </ul>
		1.3	Demonstrate first aid treatment techniques, to include: <ul style="list-style-type: none"> <li>▪ Unconsciousness</li> <li>▪ Compromised airway (including CPR)</li> <li>▪ Haemorrhage and wounds</li> <li>▪ Fractures</li> </ul>
		1.4	Explain the first aid management of burns and ingestion of poison
		1.5	Explain what information should be given to a veterinary surgeon regarding a treated first aid casualty
2	Know how to support emergency veterinary care	2.1	Explain the concept of triage and identify situations that constitute emergencies, to include communication with client, lay persons
		2.2	Explain how to prepare for the admission of an emergency case, to include consulting room, equipment, consumables and operating theatre
		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
3	Understand the principles of intravenous catheterisation	3.1	Explain the principles of intravenous cannulation, to include: <ul style="list-style-type: none"> <li>▪ Indications</li> <li>▪ Identification of access points and veins</li> <li>▪ Selection of cannula</li> <li>▪ Risks and complications</li> </ul>
		3.2	Demonstrate the safe and effective introduction of a peripheral intravenous catheter
		3.3	Explain the care of an intravenous catheter, to include: <ul style="list-style-type: none"> <li>▪ Site care</li> <li>▪ Maintaining patency</li> </ul> mentioning intermittent use, parenteral nutrition, central lines
4	Understand the nursing requirements of a critically ill or injured animal	4.1	Prepare accommodation for a critically ill patient, to include:- <ul style="list-style-type: none"> <li>▪ Types of accommodation</li> <li>▪ Environment</li> <li>▪ Access for observation and nursing</li> <li>▪ Bedding</li> <li>▪ Proximity of electrical supply and oxygen</li> <li>▪ Observation charts</li> </ul>

		4.2	Explain the nursing needs of a critically ill animal, to include: <ul style="list-style-type: none"> <li>▪ Breathing and cardiovascular function</li> <li>▪ Nutrition and fluid balance</li> <li>▪ Mobility</li> <li>▪ Hygiene</li> <li>▪ Maintaining body temperature</li> <li>▪ Pain and stress</li> </ul>
		4.3	Explain the principles of record keeping and reporting for critically ill animals
5	Understand special intensive nursing care techniques	5.1	Explain the observations required of a critically ill patient, to include: <ul style="list-style-type: none"> <li>▪ Frequency</li> <li>▪ Vital signs</li> <li>▪ Blood pressure monitoring</li> <li>▪ ECG</li> <li>▪ Neurological function</li> </ul>
		5.2	Explain the principles of administering blood and blood products, to include: <ul style="list-style-type: none"> <li>▪ Donors</li> <li>▪ Storage</li> <li>▪ Equipment and administration</li> <li>▪ Patient monitoring and complications</li> </ul>
		5.3	Explain the principles of respiratory therapy, to include: <ul style="list-style-type: none"> <li>▪ Oxygen supplementation</li> <li>▪ Tracheostomy</li> <li>▪ Thoracic drains</li> <li>▪ Pulse oximetry; blood gas analysis</li> <li>▪ Physiotherapy and postural drainage</li> </ul>
6	Know species-specific nursing requirements for patients requiring intensive care	6.1	Summarise the species-specific intensive nursing requirements of patients, mentioning cats, dogs and exotics, to include: <ul style="list-style-type: none"> <li>▪ Trauma</li> <li>▪ Major surgical procedures</li> <li>▪ Critical medical conditions</li> </ul>

## Additional information about this unit:

Unit purpose and aim(s):	This unit prepares students to provide first aid treatment to injured, and nursing care to critically ill small animals 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.
Unit expiry date:	31/07/2015
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN16, RVN17
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body

Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

### Teaching and learning guidance

#### 1 Understand the principles of small animal first aid

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

Meaning of first aid care

Legal difference between first aid and emergency veterinary treatment

Provisions of the Veterinary Surgeons Act

##### 1.2 Explain the principles of first aid management and treatment, to include

- Safety of self and others
- Models of casualty assessment
- Safe methods of movement

Safe environment, safety of first aider and others

Systematic assessment of casualty e.g. airway, breathing, circulation, neurological status, other injuries

Methods of safe movement, emergency immobilisation, prevention of further injury

##### 1.3 Demonstrate first aid treatment techniques, to include:

- Unconsciousness
- Compromised airway (including CPR)
- Haemorrhage
- Fractures

Demonstration, practical experience and testing using simulation and resuscitation mannequins where appropriate in the interests of animal welfare

##### 1.4 Explain the first aid management of burns and ingestion of poison

Immediate treatment of burns and scalds, suitable first aid dressings

Common poisons e.g. metaldehyde, theobromine

History taking, immediate treatment

Veterinary poisons information service

##### 1.5 Explain what information should be given to a veterinary surgeon regarding a treated first aid casualty

Time and nature of injury, treatment given, condition of animal throughout, presenting person's contact details, owner details if known

#### 2 Know how to support emergency veterinary care

##### 2.1 Explain the concept of triage and identify situations that constitute emergencies, to include communication with client, lay persons

Communication with client/lay person

Systematic information gathering, use of protocols

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

##### 2.2 Explain how to prepare for the admission of an emergency case, to include consulting room, equipment, consumables and operating theatre

Clearing working space, deferring non-urgent patients if necessary

Fetch emergency box, prepare IV fluids, swabs, dressings

Place general surgical set in autoclave/have pack ready

##### 2.3 Explain the contents and maintenance of an emergency "crash box" or trolley

- Contents, routine checking and rotation of contents, replenishment after use
- 2.4 *Explain how to support the veterinary surgeon during resuscitation and stabilisation procedures*  
Assist with stabilisation of case  
Importance of maintaining organisation, record-keeping throughout resuscitation/emergency surgery  
Safety:- keep floor clear, keep track of equipment, sharps
- 3 **Understand the principles of intravenous catheterisation**
- 3.1 *Explain the principles of intravenous cannulation, to include:*
- *Indications*
  - *Identification of access points and veins*
  - *Selection of cannula*
  - *Risks and complications*
- Intravenous catheter types and the theory of catheter placement  
Access points in different species  
Risks:- extravasation, thrombosis, infection
- 3.2 *Demonstrate the safe and effective introduction of a peripheral intravenous catheter*  
Practical tuition and experience using simulation and animal patients, with regard for animal welfare
- 3.3 *Explain the care of an intravenous catheter, to include:*
- *Site care*
  - *Maintaining patency*
- mentioning intermittent use, parenteral nutrition, central lines*  
Site monitoring, hygiene, catheter fixing  
Heparinisation, dealing with venous spasm, blocked catheter  
Care of central lines  
Managing parenteral nutrition
4. **Understand the nursing requirements of a critically ill or injured animal**
- 4.1 *Prepare accommodation for a critically ill patient, to include:-*
- *Types of accommodation*
  - *Environment*
  - *Access for observation and nursing*
  - *Bedding*
  - *Proximity of electrical supply and oxygen*
  - *Observation charts*
- Self explanatory
- 4.2 *Explain the nursing needs of a critically ill animal, to include:*
- *Breathing and cardiovascular function*
  - *Nutrition and fluid balance*
  - *Mobility*
  - *Hygiene*
  - *Maintaining body temperature*
  - *Pain and stress*
- Position in relation to respiratory function, oxygen therapy  
Tube or parenteral feeding, nutritional requirements of critically ill animal, fluid therapy, use of infusion pumps  
Physiotherapy:- prevention of contractures, pressure relief  
Skin care:- hygiene, prevention of maceration, matting  
Temperature control:- warming or cooling techniques  
Reduction of stress, management of pain
- 4.3 *Explain the principles of record keeping and reporting for critically ill animals*  
Record-keeping in critical care, intensive care charts  
Monitoring by appropriate personnel, recognising significant changes

5. **Understand special intensive nursing care techniques**

5.1 *Explain the observations required of a critically ill patient, to include:*

- *Frequency*
- *Vital signs*
- *Blood pressure monitoring*
- *ECC*
- *Neurological function*

Patient monitoring:-vital signs, blood pressure, neurological observations, urine output  
Frequency of monitoring, effect of normal diurnal cycle e.g. on temperature

5.2 *Explain the principles of administering blood and blood products, to include:*

- *Donors*
- *Storage*
- *Equipment and administration*
- *patient monitoring and complications*

Collection and storage of blood products  
Reasons for reactions, recognition, action to take  
Significance of transfusion rates  
Consequences of over transfusion  
Central venous pressure

5.3 *Explain the principles of respiratory therapy, to include:*

- *oxygen supplementation*
- *tracheostomy*
- *thoracic drains*
- *pulse oximetry, blood gas analysis*
- *Physiotherapy and postural drainage*

Management of patient with critical thoracic trauma

6. **Know nursing requirements for small animals requiring intensive care**

6.1 *Summarise the species-specific intensive nursing requirements of patients, mentioning cats, dogs and exotics, to include:*

- *trauma*
- *major surgical procedures*
- *critical medical conditions*

Self-explanatory

Include specific nursing requirements of a range of trauma, critical post operative and medical conditions seen in veterinary practice

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.		
<b>Summative assessments:</b>				
Type	Weighting	Comments (including word count)	Assessment criteria	
Case study series	25%	Details to be finalised	2.1-2 3.1-2 4.1-3 5.1 6.1	
Independent (centre-based) examination	25%	In accordance with assessment specification guidance provided	1.1-2, 1,4 2.3-4 3.1-2 5.2-3 6.1	
Nursing Progress Log	50%	Work-based progress log	1.3 3.2 4.1	

## UNIT SAVN18 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 2.1 Explain the concept of triage and identify situations that constitute emergencies, to include communication with client, lay persons**
- 2.2 Explain how to prepare for the admission of an emergency case, to include consulting room, equipment, consumables and operating theatre**
- 3.1 Explain the principles of intravenous cannulation, to include:**
  - **Indications**
  - **Identification of access points and veins**
  - **Selection of cannula**
  - **Risks and complications**
- 3.2 Explain the care of an intravenous catheter, to include:**
  - **Site care**
  - **Maintaining patency****mentioning intermittent use, parenteral nutrition, central lines**
- 4.1 Prepare accommodation for a critically ill patient, to include:-**
  - **Types of accommodation**
  - **Environment**
  - **Access for observation and nursing**
  - **Bedding**
  - **Proximity of electrical supply and oxygen**
  - **Observation charts**
- 4.2 Explain the nursing needs of a critically ill animal, to include:**
  - **Breathing and cardiovascular function**
  - **Nutrition and fluid balance**
  - **Mobility**
  - **Hygiene**
  - **Maintaining body temperature**
  - **Pain and stress**
- 4.3 Explain the principles of record keeping and reporting for critically ill animals**
- 5.1 Explain the observations required of a critically ill patient, to include:**
  - **Frequency**
  - **Vital signs**
  - **Blood pressure monitoring**
  - **EKG**
  - **Neurological function**
- 6.1 Summarise the species-specific intensive nursing requirements of patients, mentioning cats, dogs and exotics, to include:**
  - **trauma**
  - **major surgical procedures**
  - **critical medical conditions**

The candidate will explore the dynamics of nursing support for sick animals through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Three studies should be provided, covering a diverse range of emergency and critical care that should include the nursing support of emergency, trauma and intensive care cases. A range of species should be addressed. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- reflect of the application of their chosen (or practice-imposed) nursing model
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- Critically reflect on the issues raised and identify implications for the development of their nursing practice

### Assignment length

The Awarding Body-suggested *maximum* word limit for this assignment is 3,500 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

### Case study framework

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	Patient information and identifier
	Species, breed, age, weight/size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student’s practice
2.	Veterinary diagnosis and treatment
	<u>Overview</u> and <u>concise</u> explanation of:- <ul style="list-style-type: none"> <li>▫ Pathology</li> <li>▫ Diagnostic process</li> <li>▫ Medical/surgical treatment</li> <li>▫ Anaesthetic (if appropriate)</li> <li>▫ Follow-up</li> </ul>
3.	Nursing needs
	Using a model of nursing, identification of the patient’s requirements for nursing care <ul style="list-style-type: none"> <li>▫ Taking into account pathology, age, species, owner factors</li> <li>▫ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▫ In-patient care</li> <li>▫ Hand-over to owner and discharge</li> </ul>
4.	Nursing treatments
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physiotherapy, fluid therapy, oxygen therapy, given by the student Include radiography and diagnostic tests if appropriate
5.	Discussion
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	References and bibliography
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	Appendices
	Copy of patient’s <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

**Submission**

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

**ROYAL COLLEGE OF VETERINARY SURGEONS**
**Level 3 grading profile**

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

## UNIT SAVN 18 UNSEEN EXAMINATION SPECIFICATION

This assessment must test achievement of the following:-

- 1.1 Define the scope of first aid, mentioning legal entitlement to provide first aid to animals**
- 1.2 Explain the principles of first aid management and treatment, to include**
  - Safety of self and others
  - Models of casualty assessment**Safe methods of movement**
- 1.4 Explain the first aid management of burns and ingestion of poison**
- 1.5 Explain what information should be given to a veterinary surgeon regarding a treated first aid casualty**
- 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**
- 3.1 Explain the principles of intravenous cannulation, to include:**
  - Indications
  - Identification of access points and veins
  - Selection of cannula
  - Risks and complications
- 3.2 Explain the care of an intravenous catheter, to include:**
  - Site care
  - Maintaining patency**mentioning intermittent use, parenteral nutrition, central lines**
- 5.2 Explain the principles of administering blood and blood products, to include:**
  - Donors
  - Storage
  - Equipment and administration
  - patient monitoring and complications
- 5.3 Explain the principles of respiratory therapy, to include:**
  - oxygen supplementation
  - tracheostomy
  - thoracic drains
  - pulse oximetry; blood gas analysis
  - physical therapy and postural drainage
- 6.1 Summarise the intensive nursing requirements of patients, mentioning dogs, cats and exotics, to include:**
  - trauma
  - major surgical procedures
  - critical medical conditions

The above assessment criteria will be tested under examination conditions via an unseen paper. The period of time available should be 90 minutes, excluding reading time. The aim of this assessment is to test candidates' ability to apply a wide range of knowledge and understanding in the delivery of nursing.

Candidates should:

- produce satisfactory and coherent responses through the implicit use of a range of study skills and strategies
- demonstrate a sound grasp of the knowledge and understanding required to underpin critical care and emergency nursing practice
- demonstrate that they are able to apply theory to practice

#### **Examination details**

A mix of simple MCQ and/or short answer (approx 50 – 150 words) questions and “scenario” questions (setting out a hypothetical case on which MCQ or short answer questions are based) are recommended in order to test the range of criteria.

The examination may be divided into sections of question type and a mix of compulsory and optional questions may be included. No compensation between sections should be allowed.

The examination must be unseen and invigilated.

#### **Marks and grading**

Candidates must achieve a minimum score of 65% of the available marks in order to pass.

Marks must notified to the Awarding Body within four weeks of the date of examination and before the candidate is entered for the final external award examination.

#### **Quality assurance**

Proposed examination questions and marked scripts must be subject to a process of independent moderation in accordance with Awarding Body guidance.

**Equine option pathway**

No	Title	level	credits
EQVN20	Principles of peri-operative veterinary nursing support for horses	3	10
EQVN21	Practical peri-operative veterinary nursing support for horses	3	5
EQVN22	Principles of veterinary nursing support for equine patients	3	10
EQVN23	Practical veterinary nursing support of equine patients	3	5
EQVN24	Principles of equine veterinary nursing emergency and critical care	3	10
EQVN25	Principles of equine neonatal care	3	10
Total EQ credits			50

Unit title:		<b>EQVN 20 Principles of peri-operative veterinary nursing support for horses</b>	
Unit code:		M/601/7745	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Know how to prepare a patient for surgery	1.1	Explain the information to be obtained from the animal's owner, to include starvation normal routine, relevant veterinary history, contact details, passport
		1.2	Summarise the legal requirements for consent to a surgical procedure, to include fee estimate, explanation, signature
		1.3	Explain the principles of withholding food and fluids prior to anaesthesia
		1.4	Describe requirements for clipping and skin preparation, to include: <ul style="list-style-type: none"> <li>▪ Care and use of clippers</li> <li>▪ Identification of site</li> <li>▪ First skin scrub</li> <li>▪ Shoe removal</li> </ul>
		1.5	Explain the use of prophylactic medication
2	Understand the requirements for immediate post-operative care	2.1	Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, anaesthetic recovery, observations at handover, treatment instructions
		2.2	Interpret post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage
		2.3	Explain the physiology, recognition and management of post-operative shock
		2.4	Explain how post-operative fluid balance is maintained, to include: <ul style="list-style-type: none"> <li>▪ altered intake/output</li> <li>▪ calculating fluid requirements</li> <li>▪ maintaining intravenous infusion</li> </ul>
		2.5	Summarise the principles of effective post-operative pain management
3	Understand nursing requirements of the convalescent horse	3.1	Explain core nursing requirements during post-operative convalescence, to include: <ul style="list-style-type: none"> <li>▪ environment, accommodation</li> <li>▪ fluid and nutrition</li> <li>▪ elimination</li> <li>▪ mobility, exercise</li> <li>▪ pain relief, other medication, alleviation of stress</li> <li>▪ wound management</li> </ul>
		3.2	Describe the principles of surgical wound care, to include: <ul style="list-style-type: none"> <li>▪ complications of healing</li> <li>▪ drains</li> <li>▪ dressing and bandaging</li> <li>▪ removal of drains, closures</li> <li>▪ preventing interference</li> </ul>
4	Know nursing requirements for horses before and following specific surgical	4.1	Summarise the peri-operative nursing requirements of horses, to include: <ul style="list-style-type: none"> <li>▪ minor surgery</li> <li>▪ standing procedures</li> </ul>

	procedures		<ul style="list-style-type: none"> <li>▪ head and neck procedures</li> <li>▪ abdominal procedures</li> <li>▪ orthopaedic procedures</li> </ul>
5	Understand how to facilitate home convalescence	5.1 5.2 5.3	Analyse the factors to consider when planning for discharge, to include condition of the patient and home circumstances, transport home Explain the core requirements for a home care plan Analyse the requirements for effective discharge handover to an owner
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates understanding of peri-operative nursing care principles relating to horses 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN11, RVN15, RVN28		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

### Teaching and learning guidance

- 1 **Know how to prepare a patient for surgery**
  - 1.1 *Explain the information to be obtained from the animal's owner, to include starvation, normal routine, relevant veterinary history, contact details*

Reason for admission  
Contact details, animal's normal routine, including feeding and exercise  
Period of starvation  
General condition, any change since last consultation  
Consent  
Contact point and time to call given to owner
  - 1.2 *Summarise the legal requirements for consent to a surgical procedure, to include fee estimate, explanation, signature*

Legal requirements for consent to treatment  
Contrast with concept of informed consent
  - 1.3 *Explain the principles of withholding food and fluids prior to anaesthesia*

Risk of reflux

Pulmonary acid aspiration syndrome

Varying period of withholding in special cases e.g. geriatric animals

1.4 *Describe requirements for clipping and skin preparation, to include:*

- *Care and use of clippers*
- *Identification of site*
- *First skin scrub*
- *Shoe removal*

Aims of skin preparation, techniques and procedures:-

Identification and marking of surgical site

Restraint and handling

Shoe removal

Clippers

Skin disinfectants/antiseptics

Swabbing technique

1.5 *Explain the use of prophylactic medication, to include:-*

*Antibiotics, Tetanus toxoid and/or antitoxin, analgesia*

2 **Understand the requirements for immediate post-operative care**

2.1 *Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, anaesthetic recovery, observations at handover, treatment instructions*

Preparation of suitable recovery accommodation

Transition from anaesthetic recovery to ward

Handover observations e.g. vital signs, wound integrity and discharge, time and quality of recovery, evidence of neuropathies or myopathies

Importance of communication and record keeping

2.2 *Interpret post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage*

Common post operative complications

Preventative measures

Nursing management

Immediate post-operative care:-

Post-operative positioning and its influence on circulation and breathing

Pain monitoring

Monitoring – vital signs, wound, casts

2.3 *Explain the physiology, recognition and management of post-operative shock*

Types of shock – cardiogenic, hypovolaemic, distributive

Physiology of hypovolaemic shock, compensatory mechanisms

Signs of shock

Arrest of haemorrhage

Fluid replacement

Complications

2.4 *Explain how post-operative fluid balance is maintained, to include:*

- *altered intake/output,*
- *calculating fluid requirements,*
- *maintaining intravenous infusion*

Reasons for per-operative altered fluid balance

Calculation formulae

Gravity feed infusions and infusion pumps

Venous spasm, dealing safely with stopped infusion

Recognising extravasation

2.5 *Summarise the principles of effective post-operative pain management*

Pain relief:-

Analgesics commonly used peri and intra- operatively  
Monitoring effective pain relief (physiological signs of pain)  
Epidural analgesia, local/regional blocks

### 3 **Understand nursing requirements of the convalescent horse**

3.1 *Explain core nursing requirements during post-operative convalescence, to include:*

- *environment, accommodation*
- *fluid and nutrition*
- *defaecation and urinary output*
- *mobility, exercise*
- *pain relief, other medication, alleviation of stress*
- *wound management*

Self-explanatory

Evaluation of the above, taking into account specific condition, age and general fitness

3.2 *Describe the principles of surgical wound care, to include:*

- *normal healing*
- *complications of healing*
- *drains*
- *dressing and bandaging*
- *removal of drains, closures*
- *preventing interference*

Haematoma and bruising

Differentiation of normal inflammation and infection

Signs of wound breakdown

Purpose, types and management of wound drainage

Dressing types and their application, to include major groups of interactive dressings

Aseptic dressing technique

Purposes of bandaging (dressing retention/pressure/support) and techniques

Casting materials and application/removal of casts

Suture removal – principles for different suture types, staples

### 4 **Know nursing requirements for horses before and following specific surgical procedures**

4.1 *Summarise the peri-operative nursing requirements of horses, to include:*

- *minor surgery*
- *standing procedures*
- *head and neck procedures*
- *abdominal procedures*
- *orthopaedic procedures*

Self-explanatory

Include specific nursing requirements of range of common minor and major procedures seen in general equine veterinary practice

### 5 **Understand how to facilitate home convalescence**

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

Importance of owner concordance in the management of a patient within the home environment

The veterinary nurse's role in assisting clients whose horses require:-

Changes to their daily routine

Adaptations to the home environment

Administration of simple exercise/physiotherapy techniques

Observation and recording of clinical signs

Administration of drugs, to include implications for equine passport

5.2 *Explain the core requirements for a home care plan*

The design of after care sheets using the principles developed within nursing care, taking into account:

Activity and exercise  
 Feeding  
 Elimination  
 Care of wounds, bandages  
 Administration of medication  
 Recognising complications  
 Seeking assistance and advice

Incorporation of the results of diagnostic tests, and their implications, into the design of nursing care plans

- 5.3 *Analyse the requirements for effective discharge handover to an owner*  
 Importance of assessing needs of owner before providing care plan:-  
 Understanding and engagement  
 Ability to provide care, suitable home environment  
 Economic situation  
 Effective communication

Assessment Guidance:				
<b>Formative assessments:</b>		Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.		
<b>Summative assessments:</b>				
Type	Weighting	Comments (including word count)	Assessment criteria	
Case study series	100%	In accordance with assessment specification guidance provided	All	

## UNIT EQVN20 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 1.1 Explain the information to be obtained from the animal's owner, to include starvation normal routine, relevant veterinary history, contact details, passport**
- 1.2 Summarise the legal requirements for consent to a surgical procedure, to include fee estimate, explanation, signature**
- 1.3 Explain the principles of withholding food and fluids prior to anaesthesia**
- 1.4 Describe requirements for clipping and skin preparation, to include:**
  - Care and use of clippers
  - Identification of site
  - First skin scrub
  - Shoe removal
- 1.5 Explain the use of prophylactic medication**
- 2.1 Explain the requirements for handover from the operating theatre, to include surgical procedure, anaesthetic, anaesthetic recovery, observations at handover, treatment instructions Interpret post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage**
- 2.2 Explain the physiology, recognition and management of post-operative shock**
- 2.3 Explain how post-operative fluid balance is maintained, to include:**
  - altered intake/output,
  - calculating fluid requirements,
  - maintaining intravenous infusion
- 2.4 Summarise the principles of effective post-operative pain management**
- 3.1 Explain core nursing requirements during post-operative convalescence, to include:**
  - environment, accommodation
  - fluid and nutrition
  - elimination
  - mobility, exercise
  - pain relief, other medication, alleviation of stress
  - wound management
- 3.2 Describe the principles of surgical wound care, to include:**
  - complications of healing
  - drains
  - dressing and bandaging
  - removal of drains, closures
  - preventing interference
- 4.1 Summarise the peri-operative nursing requirements of horses, to include:**
  - minor surgery
  - standing procedures
  - head and neck procedures
  - abdominal procedures
  - orthopaedic procedures
- 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**

The candidate will explore the dynamics of perioperative nursing support through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Four case studies should be provided, covering minor, abdominal and orthopaedic peri-operative care, and both planned and emergency surgery. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- Critically reflect on the issues raised and identify implications for the development of their nursing practice

### Assignment length

The Awarding Body-suggested maximum word limit for this assignment is 5,000 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

### Case study framework

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	Patient information and identifier
	Breed, age, size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student's practice
2.	Veterinary diagnosis and treatment
	<u>Overview and concise explanation of:-</u> <ul style="list-style-type: none"> <li>▪ Pathology</li> <li>▪ Diagnostic process</li> <li>▪ Anaesthetic</li> <li>▪ Surgical procedure</li> <li>▪ Post-operative treatment and follow - up</li> </ul>
3.	Nursing needs
	Using a model of nursing, identification of the patient's requirements for nursing care <ul style="list-style-type: none"> <li>▪ Taking into account pathology, age, activity, owner factors</li> <li>▪ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▪ Pre-operative care and preparation</li> <li>▪ Immediate post-operative recovery and care</li> <li>▪ In-patient care</li> <li>▪ Hand-over to owner and discharge</li> </ul>
4.	Nursing treatments
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physical therapy, assisted feeding, given by the student Include radiography and diagnostic tests if appropriate
5.	Discussion
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	References and bibliography
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	Appendices
	Copy of patient's <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

### Submission

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the final external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of the available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

### Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

Unit title:		<b>EQVN 21 Practical peri-operative veterinary nursing support for horses</b>	
Unit code:		A/601/7747	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Be able to prepare a patient for surgery	1.1	Admit animals for surgery, to include <ul style="list-style-type: none"> <li>▪ Handover from owner</li> <li>▪ Checking consent</li> <li>▪ Recording contact details</li> <li>▪ Create nursing record</li> </ul>
		1.2	Prepare operation sites, to include: <ul style="list-style-type: none"> <li>▪ Care and use of clippers</li> <li>▪ Identification of site</li> <li>▪ First skin scrub</li> <li>▪ Removal of shoes</li> </ul>
2	Be able to provide immediate post-operative care	2.1	Receive a handover from the recovery area, to include surgical procedure, anaesthetic, observations at handover, treatment instructions
		2.2	Prepare accommodation for a post-operative patient, taking into account condition and procedure
		2.3	Record post-operative observations, to include vital signs, pain, urine output, wound appearance and drainage, and respond appropriately
		2.4	Maintain and record fluid intake, to include intravenous fluids and oral intake
		2.5	Recognise pain and stress and take appropriate measures to reduce these, to include environment, company and analgesics
3	Be able to provide care for convalescent patients	3.1	Plan, implement and evaluate care plans to address core nursing requirements during post-operative convalescence, to include: <ul style="list-style-type: none"> <li>▪ fluid and nutrition</li> <li>▪ elimination</li> <li>▪ mobility, exercise</li> <li>▪ pain relief, alleviation of stress</li> <li>▪ wound management</li> </ul>
		3.2	Care for surgical wounds to include: <ul style="list-style-type: none"> <li>▪ observation</li> <li>▪ management of drainage</li> <li>▪ dressing and bandaging</li> <li>▪ removal of drains, closures</li> <li>▪ preventing interference</li> </ul>
4	Be able to provide nursing for patients before and following specific procedures	4.1	Deliver specific peri-operative nursing care to horses, to include: <ul style="list-style-type: none"> <li>▪ minor surgery</li> <li>▪ standing surgery</li> <li>▪ head and neck procedures</li> <li>▪ abdominal procedures</li> <li>▪ orthopaedic procedures</li> </ul>
5	Be able to facilitate home convalescence	5.1	Demonstrate effective care planning for discharge, to include condition of the patient, transport home and home circumstances
		5.2	Demonstrate effective communication with patients' owners, to include oral and written guidance, teaching of practical techniques (to include

	medication)
Additional information about this unit:	
Unit purpose and aim(s):	This unit prepares students to provide peri-operative nursing care to horses 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.
Unit expiry date:	31/07/2015
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN8, RVN11, RVN15,RVN28
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	20

### Teaching and learning guidance

This unit concerns the learning of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

### Assessment Guidance:

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit
<b>Summative assessments:</b>	

	Type	Weighting	Comments	Assessment criteria:
	Nursing Progress Log	100%	Work-based progress log	All

Unit title:		<b>EQVN 22 Principles of veterinary nursing support for equine patients</b>	
Unit code:		F/601/7748	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand how pathology affects the normal function of an animal	1.1	Describe the pathology of a range of commonly encountered medical disorders, to include: <ul style="list-style-type: none"> <li>▪ Circulatory disorders</li> <li>▪ Respiratory disorders</li> <li>▪ Urinary tract disorders</li> <li>▪ Endocrine disorders</li> <li>▪ Neurological disorders</li> <li>▪ Alimentary tract disorders</li> <li>▪ Reproductive tract disorders</li> <li>▪ Musculoskeletal disorders</li> <li>▪ Disorders of the sense organs</li> </ul>
		1.2	Explain the effects of pathophysiological states and common pathologies on the normal function of an animal, to include: <ul style="list-style-type: none"> <li>▪ Sensory impairment</li> <li>▪ Behaviour</li> <li>▪ Reduced mobility</li> <li>▪ Impaired nutrition</li> <li>▪ Metabolic disturbance</li> </ul>
		1.3	Recognise the significance of abnormal diagnostic test results and the impact of these on nursing requirements
2	Understand how to plan and deliver care for horses with a range of commonly encountered conditions	2.1	Evaluate models and frameworks of nursing, to include the Roper, Logan and Tierney (Activities of Living) model and the Orem (Self Care) model, in the veterinary nursing context
		2.2	Apply appropriate models or frameworks to assess animals, plan, implement and evaluate nursing care
		2.3	Demonstrate the application of an evidence base to care planning and delivery
3	Understand the principles of wound healing and care	3.1	Explain the process of wound healing, to include healing by first intention and delayed healing
		3.2	Summarise factors that may impede healing, to include: poor perfusion, poor nutrition, infection, patient or client interference
		3.3	Explain the principles of management for chronic wounds, to include moist healing
		3.4	Appraise the use of different dressing materials in the veterinary situation, to include traditional materials, interactive dressings
4	Understand the principles of isolation nursing	4.1	Explain reasons for isolation nursing, to include infection and compromised immunity
		4.2	Explain the requirements for isolation accommodation, to include design and preparation for an admission
		4.3	Summarise required conduct of staff in relation to isolated cases, to include: <ul style="list-style-type: none"> <li>▪ Protective clothing and hand hygiene</li> <li>▪ Fomites</li> <li>▪ Access to isolation accommodation</li> </ul>

		4.4	Explain the special needs of isolated patients, to include reduction of stress, company
5	Understand how to facilitate effective home and follow-up care for horses with long-term illness	5.1 5.2	Explain the importance of client concordance in the home management of a patient and identify factors that may inhibit this Evaluate strategies for maintaining and improving client concordance with home care plans
6	Understand how to support a client through grief and loss	6.1 6.2 6.3 6.4	Explain the psychological processes of loss and grieving and summarise how these may impact on communication with a client Evaluate the nurse's role in breaking bad news to clients Explain how sensitive euthanasia can be accomplished within a busy veterinary practice Evaluate services available to assist clients to cope with loss
Additional information about this unit:			
Unit purpose and aim(s):	This unit facilitates an understanding of the complex nursing of sick horses 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: RVN15		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

## Teaching and learning guidance

### 1 Understand how pathology affects the normal function of an animal

#### 1.1 Describe the pathology of a range 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

To include degenerative, infective and neoplastic conditions commonly encountered in general practice

Presentation, diagnosis and veterinary treatment

#### 1.2 Explain the effects of pathophysiological states and common pathologies on the normal function of an animal, to include:

- Sensory impairment
- Behaviour
- Reduced mobility
- Impaired nutrition
- Metabolic disturbance

Links to outcome 1.1. Identification of the potential nursing requirements of animals with medical disorders

Taking into account life-stage and general condition

#### 1.3 Recognise the significance of abnormal diagnostic test results and the impact of these on nursing requirements

Normal parameters, abnormalities

Diagnostic tests to include:-

Body fluids

Blood tests

Urine tests

Trans-cellular fluid (peritoneal and synovial fluid )

### 2 Understand how to plan and deliver care for horses with a range of commonly encountered conditions

#### 2.1 Evaluate models and frameworks of nursing, to include the Roper, Logan and Tierney (Activities of Living) model and the Orem (Self Care) model, in the veterinary nursing context

Suitability of established "human" nursing models to the veterinary situation

Interpretation and adaptation of models

Including psychological and social factors in care planning

#### 2.2 Apply appropriate models or frameworks to assess animals, 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  
Muscular-skeletal disorders  
Disorders of the sense organs

Application of nursing techniques:-  
Assisted feeding, tube feeding  
Parenteral feeding  
Urinary catheter management and care  
Enemata  
Fluid therapy and intravenous catheter care  
Drug therapy, including the administration of cytotoxic treatment  
Physiotherapy  
Complementary therapies

- 2.3 *Demonstrate the application of an evidence base to care planning and delivery*  
Sources of information to support nursing practice  
Evidence-based versus tradition/common practice  
Reading and evaluating literature  
Critical analysis

**3 Understand the principles of wound healing and care**

- 3.1 *Explain the process of wound healing, to include healing by first intention and delayed healing*  
Physiology of healing  
1st intention, 2<sup>nd</sup> intention, delayed primary suture  
Recognising stages of healing  
Granulation tissue

Nutrition and wound healing

- 3.2 *Summarise factors that may impede healing, to include: poor perfusion, poor nutrition, infection, patient or client interference*  
Self explanatory

- 3.3 *Explain the principles of management for chronic wounds, to include moist healing*  
Factors that delay healing, effects of moisture, temperature  
Debridement – chemical and surgical  
Use of cleansing solutions, effect on healing  
Recognising colonisation and infection  
Indications for antibiotic therapy  
Use of interactive dressings

- 3.4 *Appraise the use of different dressing materials in the veterinary situation, to include traditional materials, interactive dressings*  
Functions of a wound dressing  
Properties of an ideal dressing  
Dressing types and their application, to include major groups of interactive dressings  
Removal and disposal of soiled dressings

**4 Understand the principles of isolation nursing**

- 4.1 *Explain reasons for isolation nursing, to include infection and compromised immunity*  
Define isolation, quarantine and “barrier” nursing

Reasons for patient isolation

- 4.2 *Explain the 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  
  
Condition of patient – barrier or reverse barrier nursing presence of diarrhoea; infected lesions, recumbent or mobile  
  
Bedding materials, use of disposables, placement of waste bins, gloves, aprons, footwear
- 4.3 *Summarise required conduct of staff in relation to isolated cases, to include:*  
▪ *Protective clothing and hand hygiene*  
▪ *Fomites*  
▪ *Access to isolation accommodation*  
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) head collars, rugs, bedding  
Access by essential staff, avoiding unnecessary traffic/contact  
Educating lay staff and owner
- 4.4 *Explain the special needs of isolated patients, to include reduction of stress, company*  
Self-explanatory
- 5 **Understand how to facilitate effective home and follow-up care for horses with long-term illness**
- 5.1 *Explain the importance of client concordance in the home management of a patient and identify factors that may inhibit this*  
Importance of assessing needs of owner before providing home care plan:-  
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
- 5.2 *Evaluate strategies for maintaining and improving client concordance with home care plans*  
Frequency of follow-up  
Points of contact; named nurse or vet  
Achievable goals, compromises
- 6 **Understand how to support a client through grief and loss**
- 6.1 *Explain the psychological processes of loss and grieving and summarise how these may impact on communication with a client*  
Grieving process, stages of grieving, anger as a natural reaction to loss
- 6.2 *Evaluate the nurse's role in breaking bad news to clients*  
Relationship with client, time, training  
Ongoing support – bereavement counselling
- 6.3 *Explain how sensitive euthanasia can be accomplished within a busy veterinary practice*  
Preparing clients, special entrance and exit for clients, handling of animal, support of clients  
Euthanasia services:- knackery yards, hunt kennels

Unexpected euthanasia – supporting the client

Dealing with cadaver, billing for euthanasia, crematoria

6.4 Evaluate services available to assist clients to cope with loss

Bereavement counselling

Knackers

Assessment Guidance:				
<b>Formative assessments:</b>		Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.		
<b>Summative assessments:</b>				
	<b>Type</b>	<b>Weighting</b>	<b>Comments (including word count)</b>	<b>Assessment criteria</b>
	Case Study series	50%	In accordance with assessment specification guidance provided	2.1-2.3 5.1-5.3
<b>And</b>				
	Independent (centre-based) examination	50%	In accordance with assessment specification guidance provided	1.1-1.3 3.1-3.4 4.1-4.4 6.1-6.4

## UNIT EQVN22 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 2.1 Evaluate models and frameworks of nursing, to include the Roper, Logan and Tierney (Activities of Living) model and the Orem (Self Care) model, in the veterinary nursing context**
- 2.2 Apply appropriate models or frameworks to assess animals, plan, implement and evaluate nursing care**
- 2.3 Demonstrate the application of an evidence base to care planning and delivery**
- 5.1 Explain the importance of client concordance in the home management of a patient and identify factors that may inhibit this.**
- 5.2 Evaluate strategies for maintaining and improving client concordance with home care plans**
- 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**

The candidate will explore the dynamics of nursing support for sick animals through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Three studies should be provided, covering a diverse range of medical care that should include the nursing support of in infective case, chronic illness and terminal illness. A range of species should be addressed. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- reflect of the application of their chosen (or practice-imposed) nursing model
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- critically reflect on the issues raised and identify implications for the development of their nursing practice

### **Assignment length**

The Awarding Body-suggested *maximum* word limit for this assignment is 3,500 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

**Case study framework**

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	<b>Patient information and identifier</b>
	Species, breed, age, weight/size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student's practice
2.	<b>Veterinary diagnosis and treatment</b>
	<u>Overview and concise explanation of:-</u> <ul style="list-style-type: none"> <li>▪ Pathology</li> <li>▪ Diagnostic process</li> <li>▪ Medical treatment</li> <li>▪ Follow-up</li> </ul>
3.	<b>Nursing needs</b>
	Using a model of nursing, identification of the patient's requirements for nursing care <ul style="list-style-type: none"> <li>▪ Taking into account pathology, age, species, owner factors</li> <li>▪ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▪ In-patient care</li> <li>▪ Hand-over to owner and discharge</li> <li>▪ Ongoing owner support and education</li> <li>▪ Support during euthanasia (if appropriate)</li> </ul>
4.	<b>Nursing treatments</b>
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physiotherapy, assisted feeding, given by the student Include radiography and diagnostic tests if appropriate
5.	<b>Discussion</b>
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	<b>References and bibliography</b>
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	<b>Appendices</b>
	Copy of patient's <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

**Submission**

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of the available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

## Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

## UNIT EQVN 22 UNSEEN EXAMINATION SPECIFICATION

This assessment must test achievement of the following:-

- 1.1 Describe the pathology of a range 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
  
- 1.2 Explain the effects of pathophysiological states and common pathologies on the normal function of an animal, to include:**
  - Sensory impairment
  - Behaviour
  - Reduced mobility
  - Impaired nutrition
  - Metabolic disturbance
  
- 1.3 Recognise the significance of abnormal diagnostic test results and the impact of these on nursing requirements**
  
- 3.1 Explain the process of wound healing, to include healing by first intention and delayed healing**
  
- 3.2 Summarise factors that may impede healing, to include: poor perfusion, poor nutrition, infection, patient or client interference**
  
- 3.3 Explain the principles of management for chronic wounds, to include moist healing**
  
- 3.4 Appraise the use of different dressing materials in the veterinary situation, to include traditional materials, interactive dressings**
  
- 4.1 Explain reasons for isolation nursing, to include infection and compromised immunity**
  
- 4.2 Explain the requirements for isolation accommodation, to include design and preparation for an admission**
  
- 4.3 Summarise required conduct of staff in relation to isolated cases, to include:**
  - Protective clothing and hand hygiene
  - Fomites
  - Access to isolation accommodation
  
- 4.4 Explain the special needs of isolated patients, to include reduction of stress, company**

The above assessment criteria will be tested under examination conditions via an unseen paper. The period of time available should be 90 minutes, excluding reading time. The aim of this assessment is to test candidates' ability to apply a wide range of knowledge and understanding in the delivery of nursing.

Candidates should:

- produce satisfactory and coherent responses through the implicit use of a range of study skills and strategies
- demonstrate a sound grasp of the knowledge and understanding required to underpin medical nursing practice
- demonstrate that they are able to apply theory to practice

### Examination details

A mix of simple MCQ and/or short answer (approx 50 – 150 words) questions and “scenario” questions (setting out a hypothetical case on which MCQ or short answer questions are based) are recommended in order to test the range of criteria.

The examination may be divided into sections of question type and a mix of compulsory and optional questions may be included. No compensation between sections should be allowed. The examination must be unseen and invigilated.

**Marks and grading**

Candidates must achieve a minimum score of 65% of the available marks in order to pass. Marks must notified to the Awarding Body within four weeks of the date of examination and before the candidate is entered for the final external award OSCE examination.

**Quality assurance**

Proposed examination questions and marked scripts must be subject to a process of independent moderation in accordance with Awarding Body guidance.

Unit title:		<b>EQVN 23 Practical veterinary nursing support of equine patients</b>	
Unit code:		J/601/7749	
Level		3	
Credit value:		5	
Learning outcomes:		Assessment criteria:	
1	Be able to provide care for horses with a range of commonly encountered conditions	1.1	Plan, deliver and evaluate care for animals with a range of conditions, using an appropriate model or framework
		1.2	Provide an appropriate nursing environment, taking into account the patient's species, age condition and normal routines
		1.3	Demonstrate effective communication with the veterinary team in relation to the evaluation and review of nursing care
2	Be able to perform a range of complex nursing techniques in support of sick horses	2.1	Demonstrate effective wound management techniques, to include <ul style="list-style-type: none"> <li>▪ Accurate assessment</li> <li>▪ Taking swabs</li> <li>▪ Irrigation and drains</li> <li>▪ Selection and application of dressings and supportive bandages</li> <li>▪ Client education</li> </ul>
		2.2	Administer complex medications, to include <ul style="list-style-type: none"> <li>▪ Infused medications</li> <li>▪ Intravenous bolus medications</li> </ul>
		2.3	Manage naso-gastric catheters or feeding tubes
		2.4	Manage indwelling urinary catheters, to include: <ul style="list-style-type: none"> <li>▪ Placement of, and assistance with the placement of, urinary catheters</li> <li>▪ Catheter care</li> </ul>
		2.5	Manage bowel function, to include <ul style="list-style-type: none"> <li>▪ Administration of prokinetics and faecal softeners</li> </ul>
		2.6	Demonstrate physical therapy techniques, to include: <ul style="list-style-type: none"> <li>▪ Active exercise</li> <li>▪ Limb support</li> <li>▪ Foot/frog support</li> </ul>
3	Be able to provide nursing care to patients requiring isolation	3.1	Prepare isolation accommodation for an admission
		3.2	Limit the transfer of micro-organisms through:- <ul style="list-style-type: none"> <li>▪ Effective hand hygiene</li> <li>▪ Protective clothing</li> <li>▪ Recognising and managing fomites</li> <li>▪ Restricting access to isolation accommodation</li> </ul>
		3.3	Address the special needs of isolated patients, to include reduction of stress, company
		3.4	Clean isolation accommodation:- <ul style="list-style-type: none"> <li>▪ Daily cleaning regime</li> <li>▪ Terminal disinfection</li> </ul>
4	Be able to provide appropriate home care plans for chronically sick horses	4.1	Demonstrate effective care planning for discharge, to include condition of the patient and home circumstances

		4.2	Demonstrate effective communication with patients' owners, to include oral and written guidance, teaching of practical techniques (to include medication)
Additional information about this unit:			
Unit purpose and aim(s):	This unit prepares students to provide complex nursing care to sick horses 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: RVN15		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	20		

### Teaching and learning guidance

This unit concerns the learning of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

### Assessment Guidance:

<b>Formative assessments:</b>	Centres should ensure suitable formative assessments accompany this unit
<b>Summative assessments:</b>	

Type	Weighting	Comments	Assessment criteria:
Nursing Progress Log	100%	Work-based progress log	All

Unit title:		<b>EQVN 24 Principles of equine veterinary nursing emergency and critical care</b>	
Unit code:		A/601/7750	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand the principles of equine first aid	1.1	Define the scope of first aid, mentioning legal entitlement to provide first aid to horses
		1.2	Explain the principles of first aid management and treatment, to include <ul style="list-style-type: none"> <li>▪ Safety of self and others</li> <li>▪ Models of casualty assessment</li> <li>▪ Safe methods of movement</li> </ul>
		1.3	Demonstrate first aid treatment techniques, to include: <ul style="list-style-type: none"> <li>▪ Haemorrhage and wounds</li> <li>▪ Musculo-skeletal injuries</li> <li>▪ Cast horse</li> <li>▪ Severe abdominal pain</li> </ul>
		1.4	Explain the first aid management of burns and ingestion of poison
		1.5	Explain what information should be given to a veterinary surgeon regarding a treated first aid casualty
2	Know how to support emergency veterinary care	2.1	Explain the concept of triage and identify situations that constitute emergencies, to include communication with client, lay persons
		2.2	Explain how to prepare for the admission of an emergency case, to include admission area, equipment, consumables and operating theatre
		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
3	Understand the principles of intravenous catheterisation	3.1	Explain the principles of intravenous cannulation, to include: <ul style="list-style-type: none"> <li>▪ Indications</li> <li>▪ Identification of access points and veins</li> <li>▪ Selection of cannula</li> <li>▪ Risks and complications</li> </ul>
		3.2	Explain the care of an intravenous catheter, to include: <ul style="list-style-type: none"> <li>▪ Site care</li> <li>▪ Maintaining patency</li> </ul> mentioning intermittent use, parenteral nutrition, central lines

4	Understand the nursing requirements of a critically ill or injured horse	4.1 4.2 4.3	Prepare accommodation for a critically ill patient, to include:- <ul style="list-style-type: none"> <li>▪ Types of accommodation</li> <li>▪ Environment</li> <li>▪ Access for observation and nursing</li> <li>▪ Bedding</li> <li>▪ Availability of electrical supply</li> </ul> Observation charts Explain the nursing needs of a critically ill horse, to include: <ul style="list-style-type: none"> <li>▪ Breathing and cardiovascular function</li> <li>▪ Nutrition and fluid balance</li> <li>▪ Mobility</li> <li>▪ Hygiene</li> <li>▪ Maintaining body temperature</li> <li>▪ Pain and stress</li> </ul> Explain the principles of record keeping and reporting for critically ill animals
5	Understand special intensive nursing care techniques	5.1 5.2 5.3	Explain the observations required of a critically ill patient, to include: <ul style="list-style-type: none"> <li>▪ Frequency</li> <li>▪ Vital signs</li> <li>▪ ECG</li> <li>▪ Neurological function</li> </ul> Explain the principles of administering blood and blood products, to include: <ul style="list-style-type: none"> <li>▪ Donors</li> <li>▪ Storage</li> <li>▪ Equipment and administration</li> <li>▪ Patient monitoring and complications</li> </ul> Explain the principles of respiratory therapy, to include: <ul style="list-style-type: none"> <li>▪ Oxygen supplementation</li> <li>▪ Tracheostomy</li> <li>▪ Thoracic drains</li> <li>▪ Pulse oximetry; blood gas analysis</li> </ul>
6	Know nursing requirements for horses requiring intensive care	6.1	Summarise the intensive nursing requirements of horses, to include: <ul style="list-style-type: none"> <li>▪ Trauma</li> <li>▪ Major surgical procedures</li> <li>▪ Critical medical conditions</li> </ul>

## Additional information about this unit:

Unit purpose and aim(s):	This unit prepares students to provide first aid treatment to injured, and nursing care to critically ill horses 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.
Unit expiry date:	31/07/2015
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS units: RVN16, RVN17
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.
Support for the unit by Sector Skills Council	This unit is supported by Lantra

Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body
Availability for use:	Shared
Unit available from:	1 August 2010
Unit guided learning hours:	40

### Teaching and learning guidance

#### 1 Understand the principles of equine first aid

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

Meaning of first aid care

Legal difference between first aid and emergency veterinary treatment

Provisions of the Veterinary Surgeons Act

##### 1.2 Explain the principles of first aid management and treatment, to include

- Safety of self and others
- Models of casualty assessment
- Safe methods of movement

Safe environment, safety of first aider and others

Systematic assessment of casualty e.g. airway, breathing, circulation, neurological status, other injuries

Methods of safe movement, emergency immobilisation, prevention of further injury

##### 1.3 Demonstrate first aid treatment techniques, to include:

- Haemorrhage and wounds
- Musculo-skeletal injuries
- Cast horse
- Severe abdominal pain

Demonstration, practical experience and testing using simulation where appropriate in the interests of animal welfare

##### 1.4 Explain the first aid management of burns and ingestion of poison

Immediate treatment of burns and scalds, suitable first aid dressings

Common poisons e.g. ragwort, yew

History taking, immediate treatment

Veterinary poisons information service

##### 1.5 Explain what information should be given to a veterinary surgeon regarding a treated first aid casualty

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

#### 2 Know how to support emergency veterinary care

##### 2.1 Explain the concept of triage and identify situations that constitute emergencies, to include communication with client, lay persons

Communication with client/lay person

Systematic information gathering, use of protocols

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

##### 2.2 Explain how to prepare for the 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

Place general surgical set in autoclave/have pack ready

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

Contents, routine checking and rotation of contents, replenishment after use

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

Assist with stabilisation of case

Importance of maintaining organisation, record-keeping throughout resuscitation/emergency surgery

Safety:- keep floor clear, keep track of equipment, sharps

3 **Understand the principles of intravenous catheterisation**

3.1 *Explain the principles of intravenous cannulation, to include:*

- *Indications*
- *Identification of access points and veins*
- *Selection of cannula*
- *Risks and complications*

Intravenous catheter types and the theory of catheter placement

Access points in different species

Risks:- extravasation, thrombosis, infection

3.2 *Explain the care of an intravenous catheter, to include:*

- *Site care*
- *Maintaining patency*

*mentioning intermittent use, parenteral nutrition, central lines*

Site monitoring, hygiene, catheter fixing

Heparinisation, dealing with venous spasm, blocked catheter

Care of central lines

Managing parenteral nutrition

4. **Understand the nursing requirements of a critically ill or injured horse**

4.1 *Prepare accommodation for a critically ill patient, to include:-*

- *Types of accommodation*
- *Environment*
- *Access for observation and nursing*
- *Bedding*
- *Availability of electrical supply*
- *Observation charts*

Self explanatory

4.2 *Explain the nursing needs of a critically ill horse, to include:*

- *Breathing and cardiovascular function*
- *Nutrition and fluid balance*
- *Mobility*
- *Hygiene*
- *Maintaining body temperature*
- *Pain and stress*

Position in relation to respiratory function, oxygen therapy,

Tube or parenteral feeding, nutritional requirements of critically ill animal, fluid therapy, use of infusion pumps

Physiotherapy:- prevention of contractures, pressure relief, support/slings in limb injury

Skin care:- hygiene, prevention of maceration

Temperature control:- warming or cooling techniques

Reduction of stress, management of pain

4.3 *Explain the principles of record keeping and reporting for critically ill animals*

Record-keeping in critical care, intensive care charts  
Monitoring by appropriate personnel, recognising significant changes

5. **Understand special intensive nursing care techniques**

5.1 *Explain the observations required of a critically ill patient, to include:*

- *Frequency*
- *Vital signs*
- *ECC*
- *Neurological function*

Patient monitoring:-vital signs, blood pressure, neurological observations, urine output, faecal output

Blood gas analysis

Frequency of monitoring

5.2 *Explain the principles of administering blood and blood products, to include:*

- *Donors*
- *Storage*
- *Equipment and administration*
- *Patient monitoring and complications*

Collection and storage of blood products

Reasons for reactions, recognition, action to take

Significance of transfusion rates

Consequences of over transfusion

Central venous pressure

5.3 *Explain the principles of respiratory therapy, to include:*

- *oxygen supplementation*
- *tracheostomy*
- *thoracic drains*
- *pulse oximetry, blood gas analysis*

Management of patient with critical thoracic trauma

6. **Know nursing requirements for equine requiring intensive care**

6.1 *Summarise the species-specific intensive nursing requirements of horses, to include:*

- *trauma*
- *major surgical procedures*
- *critical medical conditions*

Self-explanatory

Include specific nursing requirements of a range of trauma, critical post operative and medical conditions seen in veterinary practice

<b>Assessment Guidance:</b>				
<b>Formative assessments:</b>		Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.		
<b>Summative assessments:</b>				
	Type	Weighting	Comments (including word count)	Assessment criteria
1.	Case study series	25%	Details to be finalised	2.1-2 3.1-2 4.1-3 5.1 6.1
2.	Independent (centre-based) examination	25%		1.1-2,1.4-5 2.3-4 3.1-2 5.2-3 6.1
3.	Nursing Progress Log	50%		1.3 4.1 6.1

## UNIT EQVN24 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 2.1 Explain the concept of triage and identify situations that constitute emergencies, to include communication with client, lay persons**
- 2.2 Explain how to prepare for the admission of an emergency case, to include admission area, equipment, consumables and operating theatre**
- 3.1 Explain the principles of intravenous cannulation, to include:**
  - **Indications**
  - **Identification of access points and veins**
  - **Selection of cannula**
  - **Risks and complications**
  -
- 3.2 Explain the care of an intravenous catheter, to include:**
  - **Site care**
  - **Maintaining patency****mentioning intermittent use, parenteral nutrition, central lines**
- 4.1 Prepare accommodation for a critically ill patient, to include:-**
  - **Types of accommodation**
  - **Environment**
  - **Access for observation and nursing**
  - **Bedding**
  - **Proximity of electrical supply and oxygen**
  - **Observation charts**
- 4.2 Explain the nursing needs of a critically ill animal, to include:**
  - **Breathing and cardiovascular function**
  - **Nutrition and fluid balance**
  - **Mobility**
  - **Hygiene**
  - **Maintaining body temperature**
  - **Pain and stress**
- 4.3 Explain the principles of record keeping and reporting for critically ill animals**
- 5.1 Explain the observations required of a critically ill patient, to include:**
  - **Frequency**
  - **Vital signs**
  - **Blood pressure monitoring**
  - **ECG**
  - **Neurological function**
- 6.1 Summarise the species-specific intensive nursing requirements of horses, to include:**
  - **Trauma**
  - **Major surgical procedures**
  - **Critical medical conditions**

The candidate will explore the dynamics of nursing support for sick animals through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Three studies should be provided, covering a diverse range of emergency and critical care that should include the nursing support of emergency, trauma and intensive care cases. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- reflect of the application of their chosen (or practice-imposed) nursing model
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- Critically reflect on the issues raised and identify implications for the development of their nursing practice

### Assignment length

The Awarding Body-suggested *maximum* word limit for this assignment is 3,500 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

### Case study framework

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	Patient information and identifier
	Species, breed, age, weight/size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student's practice
2.	Veterinary diagnosis and treatment
	<u>Overview</u> and <u>concise</u> explanation of:- <ul style="list-style-type: none"> <li>▫ Pathology</li> <li>▫ Diagnostic process</li> <li>▫ Medical/surgical treatment</li> <li>▫ Anaesthetic (if appropriate)</li> <li>▫ Follow-up</li> </ul>
3.	Nursing needs
	Using a model of nursing, identification of the patient's requirements for nursing care <ul style="list-style-type: none"> <li>▫ Taking into account pathology, age, species, owner factors</li> <li>▫ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▫ In-patient care</li> <li>▫ Hand-over to owner and discharge</li> </ul>
4.	Nursing treatments
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physiotherapy, fluid therapy, oxygen therapy, given by the student Include radiography and diagnostic tests if appropriate
5.	Discussion
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	References and bibliography
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	Appendices
	Copy of patient's <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

### Submission

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

### Grading

Candidates must achieve a minimum score of 50% of available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

## Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

## UNIT EQVN 24 UNSEEN EXAMINATION SPECIFICATION

This assessment must test achievement of the following:-

- 1.1 Define the scope of first aid, mentioning legal entitlement to provide first aid to horses**
- 1.2 Explain the principles of first aid management and treatment, to include**
  - Safety of self and others
  - Models of casualty assessment**Safe methods of movement**
- 1.4 Explain the first aid management of burns and ingestion of poison**
- 1.5 Explain what information should be given to a veterinary surgeon regarding a treated first aid casualty**
- 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**
- 3.1 Explain the principles of intravenous cannulation, to include:**
  - Indications
  - Identification of access points and veins
  - Selection of cannula
  - Risks and complications
- 3.2 Explain the care of an intravenous catheter, to include:**
  - Site care
  - Maintaining patency**mentioning intermittent use, parenteral nutrition, central lines**
- 5.2 Explain the principles of administering blood and blood products, to include:**
  - Donors
  - Storage
  - Equipment and administration
  - patient monitoring and complications
- 5.3 Explain the principles of respiratory therapy, to include:**
  - oxygen supplementation
  - tracheostomy
  - thoracic drains
  - pulse oximetry; blood gas analysis
- 6.1 Summarise the intensive nursing requirements of horses, to include:**
  - trauma
  - major surgical procedures
  - critical medical conditions

The above assessment criteria will be tested under examination conditions via an unseen paper. The period of time available should be 90 minutes, excluding reading time. The aim of this assessment is to test candidates' ability to apply a wide range of knowledge and understanding in the delivery of nursing.

Candidates should:

- produce satisfactory and coherent responses through the implicit use of a range of study skills and strategies
- demonstrate a sound grasp of the knowledge and understanding required to underpin critical care and emergency nursing practice
- demonstrate that they are able to apply theory to practice

**Examination details**

A mix of simple MCQ and/or short answer (approx 50 – 150 words) questions and “scenario” questions (setting out a hypothetical case on which MCQ or short answer questions are based) are recommended in order to test the range of criteria.

The examination may be divided into sections of question type and a mix of compulsory and optional questions may be included. No compensation between sections should be allowed. The examination must be unseen and invigilated.

**Marks and grading**

Candidates must achieve a minimum score of 65% of the available marks in order to pass. Marks must notified to the Awarding Body within four weeks of the date of examination and before the candidate is entered for the final external award examination.

**Quality assurance**

Proposed examination questions and marked scripts must be subject to a process of independent moderation in accordance with Awarding Body guidance.

Unit title:		<b>EQVN 25 Principles of equine neonatal care</b>	
Unit code:		F/601/7751	
Level		3	
Credit value:		10	
Learning outcomes:		Assessment criteria:	
1	Understand normal foal physiology and development	1.1	Explain key differences between the major body systems of neonates, foals and adult horses
		1.2	Explain the development of immunity in equine neonates, to include significance for nursing care
		1.3	Describe the normal adaptive behaviour and reflexes of a newborn foal
2	Understand foal nutrition and feeding	2.1	Summarise the process of lactation in the mare, to include: <ul style="list-style-type: none"> <li>▪ Nutritional requirements of mare</li> <li>▪ Physiology of milk production and let-down</li> <li>▪ Constituents of colostrum and milk</li> </ul>
		2.2	Explain the requirements of foal weaning, to include <ul style="list-style-type: none"> <li>▪ feed requirements</li> <li>▪ separation from the mare</li> <li>▪ monitoring</li> </ul>
		2.3	Explain the nursing requirements of an orphan foal, to include: <ul style="list-style-type: none"> <li>▪ Feeding and nutrition</li> <li>▪ Socialisation</li> </ul>
3	Understand the routine veterinary care of normal foals	3.1	Explain requirements for handling and foot care, to include: <ul style="list-style-type: none"> <li>▪ Catching and restraint</li> <li>▪ Farriery requirements</li> </ul>
		3.2	Summarise the reasons, and normal protocols, for parasite control in foals
		3.3	Summarise the normal vaccination protocols for foals
		3.4	Explain the protocols and requirements for breed registration, to include Weatherbys
4	Understand the nursing requirements of sick foals	4.1	Explain the accommodation requirements for nursing foals, to include bedding, temperature, infection control
		4.2	Explain the essential nursing requirements of recumbent foals to include: <ul style="list-style-type: none"> <li>▪ Hygiene, infection control</li> <li>▪ Positioning, skin care</li> <li>▪ Maintaining temperature</li> <li>▪ Nutrition and fluids</li> <li>▪ Umbilical and eye care</li> <li>▪ Physiotherapy</li> </ul>
		4.3	Explain the nursing support of foals undergoing investigations and supportive therapies, to include: <ul style="list-style-type: none"> <li>▪ Blood sampling</li> <li>▪ Diagnostic imaging</li> <li>▪ Parenteral fluids and nutrition</li> </ul>

			<ul style="list-style-type: none"> <li>▪ Tube feeding</li> <li>▪ Oxygen therapy</li> <li>▪ Urinary catheterisation</li> </ul>
5	Be able to provide nursing care to a sick foal	5.1 5.2 5.3 5.4 5.5	Prepare and maintain a suitable nursing environment for a sick foal Provide essential nursing care for a sick foal Manage and maintain supportive veterinary therapies Monitor sick neonates, to include interpretation and appropriate reporting of observations Provide appropriate support and information to owners
Additional information about this unit:			
Unit purpose and aim(s):	This unit 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.		
Unit expiry date:	31/07/2015		
Relationship with National Occupational Standards:	This relates to the following Veterinary Nursing NOS unit: RVN15		
Assessment requirements/guidance in relation to the Register of Veterinary Nurses	This unit is intended to form part of a qualification leading to a regulated professional licence. As such it must be independently assessed.  Nb: Some of the procedures that must be demonstrated in the assessment outcomes of this unit are legally restricted to those enrolled with the RCVS as student veterinary nurses (Veterinary Surgeons Act 1966, Schedule 3)		
Support for the unit by Sector Skills Council	This unit is supported by Lantra		
Location of the unit within the subject/sector classification system:	Animal Care and Veterinary Science		
Name of submitting organisation:	Royal College of Veterinary Surgeons Awarding Body		
Availability for use:	Shared		
Unit available from:	1 August 2010		
Unit guided learning hours:	40		

### Teaching and learning guidance

#### 1 Understand normal foal physiology and development

##### 1.1 Explain key differences between the major body systems of *neonates*, foals and adult horses

Immune system  
Cardiovascular system  
Respiratory system  
Renal system  
Gastro-intestinal system  
Temperature control

##### 1.2 Explain the development of immunity in equine neonates, to include significance for nursing care

Passive immunity, significance of colostrum

Importance of hygiene

1.3 *Describe the normal adaptive behaviour and reflexes of a newborn foal*

Righting and suck reflexes

Standing

Urination, passing of meconium

Behaviour

## 2 **Understand foal nutrition and feeding**

2.1 *Summarise the process of lactation in the mare, to include:*

- *Nutritional requirements of mare*
- *Physiology of milk production and let-down*
- *Constituents of colostrum and milk*

Mammary function, hormonal control of lactation

Milk let-down, painful udders, mastitis

Agalactia

Constituents of colostrum and milk

Milking

2.2 *Explain the requirements of foal weaning, to include*

- *feed requirements*
- *separation from the mare*
- *monitoring*

Milk requirements

Development of intestinal function

Weaning:- age, feed requirements

Removing the mare

Monitoring growth rate

2.3 *Explain the nursing requirements of an orphan foal, to include:*

- *Feeding and nutrition*
- *Socialisation*

Use of milk replacers, bucket feeding

Vitamin/mineral supplements

Equine company

## 3 **Understand the routine veterinary care of normal foals**

3.1 *Explain requirements for handling and foot care, to include:*

- *Catching and restraint*
- *Farriery requirements*

Early handling, safe techniques, foot care

3.2 *Summarise the reasons, and normal protocols, for parasite control in foals*

Worming protocols

Paddock management

3.3 *Summarise the normal vaccination protocols for foals*

Vaccines and protocols

3.4 *Explain the protocols and requirements for breed registration, to include Weatherbys*

Breeds, markings, colours

Breed societies

Blood sampling, microchipping

Foal registration

Passports

## 4 **Understand the nursing requirements of sick foals**

4.1 *Explain the accommodation requirements for nursing foals, to include bedding, temperature, infection control*

Bedding materials, foot dips, hand-washing

4.2 *Explain the essential nursing requirements of recumbent foals to include:*

- *Hygiene, infection control*
- *Positioning, skin care*
- *Maintaining temperature*
- *Nutrition and fluids*
- *Umbilical and eye care*
- *Physiotherapy*

Conditions affecting sick foals:- disturbed adaptive processes, developmental conditions, infections, immunological conditions

Monitoring: - vital signs, urine output, behaviour

Temperature control:- ambient temperature, use of rug, bandages

Position:- respiratory function, pressure relief, change of bedding

Physiotherapy:- prevention of flexural deformity, introducing exercise

Feeding, urination, defaecation, to include administration of enemata

Care planning and record-keeping

4.3 *Explain the nursing support of foals undergoing investigations and supportive therapies, to include:*

- *Blood sampling*
- *Diagnostic imaging*
- *Parenteral fluids and nutrition*
- *Tube feeding*
- *Oxygen therapy*
- *Urinary catheterisation*

Stabilisation of sick foal

Fluid requirements

Blood pressure monitoring, pulse oximetry

Administration of blood and plasma

IgG monitoring - include importance of passive transfer of immunity, use of donor colostrum and donor plasma; implications of low IgG for future health

5 **Be able to provide nursing care to a sick foal**

This outcome concerns the application of practical skills and techniques as stipulated in the assessment criteria. It is anticipated that techniques will be taught both in the college and practice environments, paying attention to safe and effective practice. Simulation may be used in teaching where appropriate, and in the interests of animal welfare.

**Assessment Guidance:**

**Formative assessments:** Course providers should ensure suitable formative assessments accompany this unit in order to test and provide feedback on progress.

**Summative assessments:**

Type	Weighting	Comments (including word count)	Assessment criteria
Case study series	25%	In accordance with assessment specification guidance provided	4.1-3
Independent (college-based) examination	25%	In accordance with assessment specification guidance provided	1.1-3 2.2-3 3.1-4
Nursing Progress Log	50%		5.1-5

## UNIT EQVN25 ASSIGNMENT SPECIFICATION

This assignment must test achievement of the following:-

- 4.1 Explain the accommodation requirements for nursing foals, to include bedding, temperature, infection control**
- 4.2 Explain the essential nursing requirements of recumbent foals to include:**
  - Hygiene, infection control
  - Positioning, skin care
  - Maintaining temperature
  - Nutrition and fluids
  - Umbilical and eye care
  - Physiotherapy
- 4.3 Explain the nursing support of foals undergoing investigations and supportive therapies, to include:**
  - Blood sampling
  - Diagnostic imaging
  - Parenteral fluids and nutrition
  - Tube feeding
  - Oxygen therapy
  - Urinary catheterisation

The candidate will explore the dynamics of nursing support for sick foals through a portfolio of case studies, in which the student has actively and extensively participated in care. Through discussion the candidate must identify both exemplars of good practice and areas that could benefit from improvement.

Three studies should be provided, covering a diverse range of care that should include the nursing support of neonates and foals requiring medical and peri-operative care. Candidates must be required to supply case identifiers that may be checked by the centre against practice records in order to guard against fabrication and plagiarism.

Candidates should :

- produce a satisfactory assignment on time through the implicit use of a range of study skills and strategies
- demonstrate that they are able to apply theory to practice
- show ability to make reference to, and apply, key texts and/or supporting literature/materials
- explain the nursing needs of the animals concerned, with reference to pathology and a chosen model of nursing
- reflect on the application of their chosen (or practice-imposed) nursing model
- discuss the effectiveness of nursing care in the chosen cases and explore possible ways in which this might have been improved (if appropriate)
- critically reflect on the issues raised and identify implications for the development of their nursing practice

### **Assignment length**

The Awarding Body-suggested *maximum* word limit for this assignment is 3,500 words. Programme providers must provide candidates with clear guidance on the maximum length of assignment permitted and should require candidates to provide a word count. Assignments that exceed the stated limit must not be accepted.

**Case study framework**

It is strongly recommended that centres use a template for the construction of nursing case studies to ensure consistency of approach, for example:-

1.	<b>Patient information and identifier</b>
	Breed, age, weight/size Case identifier –should enable identification of the case for certification purposes but not compromise confidentiality outside the student's practice
2.	<b>Veterinary diagnosis and treatment</b>
	<u>Overview and concise explanation of:-</u> <ul style="list-style-type: none"> <li>▪ Pathology</li> <li>▪ Diagnostic process</li> <li>▪ Medical/surgical treatment</li> <li>▪ Anaesthetic (if appropriate)</li> <li>▪ Follow-up</li> </ul>
3.	<b>Nursing needs</b>
	Using a model of nursing, identification of the patient's requirements for nursing care <ul style="list-style-type: none"> <li>▪ Taking into account pathology, age, species, owner factors</li> <li>▪ Identifying actual and potential nursing problems</li> </ul> Plan of nursing care, taking into account: <ul style="list-style-type: none"> <li>▪ In-patient care</li> <li>▪ Hand-over to owner and discharge</li> </ul>
4.	<b>Nursing treatments</b>
	<u>Overview</u> of nursing treatments and/or therapies, for example administration of medication, wound management, physiotherapy, fluid therapy, oxygen therapy, given by the student Include radiography and diagnostic tests if appropriate
5.	<b>Discussion</b>
	<u>In-depth reflection</u> on the care provided, critical analysis in the light of literature, identification of areas to develop/improve in practice
6.	<b>References and bibliography</b>
	Lists of cited literature and other background reading Harvard or Chicago system to be used
7.	<b>Appendices</b>
	Copy of patient's <u>actual</u> nursing care plan and hospital sheets (suitably redacted to remove identification)

**Submission**

This assignment must be submitted and marks notified to the Awarding Body before the candidate is entered for the external award examination.

**Grading**

Candidates must achieve a minimum score of 50% of available marks in order to pass.

**Quality assurance**

Assignments must be subject to a process of independent moderation in accordance with Awarding Body guidance.

## ROYAL COLLEGE OF VETERINARY SURGEONS

### Level 3 grading profile

NB: Students must obtain a minimum score of 5 in each section. Marks awarded must achieve an overall pass of 50%

	CRITERIA	0 1 2 3 4 5	5 6 7 8 9	10	11 12 13	14 15 16 17	18 19 20	Marker	Mod'tor
1	USE OF CURRENT SPECIALIST AND CLINICAL KNOWLEDGE	Inadequate evidence of relevant knowledge base	Poor evidence of theoretical knowledge; inclusion of irrelevant material		Relevant and sufficient knowledge base; shows evidence of appropriate application to practice.	Reflects on knowledge base and consistently applies it to clinical practice	Evaluates and reflects upon current knowledge in order to reach fresh insights into practice		
2	DISCUSSION AND HANDLING OF ISSUES	A poor quality piece of work with little evidence of knowledge and comprehension	Elementary understanding of issues but shows poor ability to reflect		Sound understanding of issues. Some attempt to reflect on own performance	Competent and reflective handling of material but largely uncritical	Competent and reflective handling of material; demonstrates developing critical skills		
3	WRITTEN EXPRESSION	Poorly expressed and obscure piece of work	Meaning obscured and does not always get to the point		Meaning clear but does not get to the point in the most effective way	Gets to the point and meaning clear	Meaning clear and points are competently illustrated		
4	USE OF SUPPORTING LITERATURE AND MATERIALS	Little or no evidence of use of supporting literature and materials	Marginal use of supporting literature and materials		Competently applied use of relevant supporting literature and materials but little evidence of analysis	Application of appropriate literature and materials with some analysis	Consistent application and analysis of appropriate literature /materials		
5	OVERALL ACHIEVEMENT OF ASSESSMENT CRITERIA	Poor; no assessment criteria have been achieved	Evidence of superficial achievement in some assessment criteria		All assessment criteria achieved with some marginal aspects	Overall standard acceptable with some above average work	Work of a consistently high standard throughout		

Candidate's name	Enrolment number:	Date:	Marked by:	Moderated by:	Mark awarded:

## UNIT EQVN 25 UNSEEN EXAMINATION SPECIFICATION

This assessment must test achievement of the following:-

- 1.1 Explain key differences between the major body systems of neonates, foals and adult horses**
- 1.2 Explain the development of immunity in equine neonates, to include significance for nursing care**
- 1.3 Describe the normal adaptive behaviour and reflexes of a newborn foal**
- 2.1 Summarise the process of lactation in the mare, to include:**
  - Nutritional requirements of mare
  - Physiology of milk production and let-down
  - Constituents of colostrum and milk
- 2.2 Explain the requirements of foal weaning, to include**
  - feed requirements
  - separation from the mare
  - monitoring
- 2.3 Explain the nursing requirements of an orphan foal, to include:**
  - Feeding and nutrition
  - Socialisation
- 3.1 Explain requirements for handling and foot care, to include:**
  - Catching and restraint
  - Farriery requirements
- 3.2 Summarise the reasons, and normal protocols, for parasite control in foals**
- 3.3 Summarise the normal vaccination protocols for foals**
- 3.4 Explain the protocols and requirements for breed registration, to include Weatherbys**

The above assessment criteria will be tested under examination conditions via an unseen paper. The period of time available should be 90 minutes, excluding reading time. The aim of this assessment is to test candidates' ability to apply a wide range of knowledge and understanding in the delivery of nursing.

Candidates should:

- produce satisfactory and coherent responses through the implicit use of a range of study skills and strategies
- demonstrate a sound grasp of the knowledge and understanding required to underpin foal nursing practice
- demonstrate that they are able to apply theory to practice

### **Examination details**

The Awarding Body-suggested examination time is two hours, excluding reading time. A mix of simple MCQ and/or short answer (approx 50 – 150 words) questions and "scenario" questions (setting out a hypothetical case on which MCQ or short answer questions are based) are recommended in order to test the range of criteria.

The examination may be divided into sections of question type and a mix of compulsory and optional questions may be included. No compensation between sections should be allowed.

The examination must be unseen and invigilated.

**Marks and grading**

Candidates must achieve a minimum score of 65% of the available marks in order to pass.

Marks must notified to the Awarding Body within four weeks of the date of examination and before the candidate is entered for the final external award examination.

**Quality assurance**

Proposed examination questions and marked scripts must be subject to a process of independent moderation in accordance with Awarding Body guidance

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