

BSc / DVM

Bachelor of Science

Doctor of Veterinary Medicine

Course Learning Outcomes

Last updated May 2023

SVM Education Mission:

We value provision of an integrated and balanced educational experience that empowers our graduates to achieve lifelong professional success, through supportive preparation for transition to career, and for sustained success within a diverse and thriving profession.

The learning outcomes of the BSc/DVM course comprise:

10	Course Learning Outcomes (CLOs), including:	Broad statements of the outcomes expected to be developed by students across the entire course, in terms of knowledge, skills, attitudes and attributes
6	Essential Competencies	CLOs which must be developed beyond a threshold level (competence) by every student
3	Enabling Capabilities	CLOs important for sustained professional success, assessed more formatively
1	Core reflective process	An overarching process of reflection forming a 'master key' for achievement of other CLOs
8	Entrustable Professional Activities (EPAs)	Complex professional tasks that can be entrusted to sufficiently competent professionals



Other outcomes to be achieved within these CLOs include:

Day One Competencies (D1Cs)	Essential competencies defined by international accrediting bodies including the Australasian Veterinary Boards Council (AVBC), Royal College of Veterinary Surgeons (RCVS), and American Veterinary Medical Association (AVMA)
Skills List	A comprehensive list of the observable skills and abilities needed for veterinary professional activities
Master Problem List	Common or important problems and presentations, which students should be able to diagnose and manage
Codes of Professional Conduct	Expected standards of professional behaviour, diligence and integrity defined by veterinary professional bodies
Fitness to Practice	Assurance of professional conduct and good character, required by regulators

BSc/DVM Course Learning Outcomes (CLOs)

The graduate is able to:

1	Communication	Communicate appropriately and effectively with diverse clients, colleagues and other stakeholders with empathy, compassion and respect, including in the context of a veterinary <i>consultation</i> (EPA1).	6	Professional conduct	Consistently demonstrate the professional behaviours and attitudes expected of a veterinarian, and uphold ethical, legal, and animal welfare responsibilities, including awareness of their own limitations.
2	Clinical proficiency	Perform entry-level veterinary diagnostic, therapeutic, and animal handling and examination procedures, including in the context of <i>surgery</i> (EPA6) and <i>anaesthesia</i> (EPA 7).	7	Productive relationships	Demonstrate <i>approaches to others</i> that foster productive relationships with diverse clients and team members, to support delivery of relationship-centred care as part of a collaborative interprofessional team.
3	Specialised knowledge	Demonstrate and apply highly specialised knowledge of health, welfare and disease in a range of animal species, and One Health (public health and biosecurity) principles, within the broader contexts of veterinary work.	8	Psychological resources	Demonstrate <i>approaches to self</i> that foster psychological and social resources supporting resilience and sustainable engagement with the veterinary profession, including motivation, emotional competence, life balance, and adaptability.
4	Problem-solving	Gather and critically analyse information to solve and manage complex veterinary problems, including in the context of <i>diagnosis</i> (EPA2), <i>case management and care</i> (EPA3), <i>emergency response</i> (EPA4), and <i>promoting health</i> (EPA8).	9	Professional commitment	Demonstrate <i>approaches to work</i> that foster efficient provision of high-quality care and professional practice, including workflow management, autonomy, diligence, and commitment.
5	Research	Systematically retrieve and synthesise evidence, apply scientific methods to independently investigate specific research questions in veterinary science, and disseminate findings, including in the context of <i>evidence-based practice</i> (EPA5).	10	Reflective development	Reflect on personal capabilities, actions and experiences, in support of lifelong independent learning and formation of a confident professional identity.

Course Learning Outcomes - BSc and DVM levels

CLOs may be expressed differently at Bachelor and DVM (extended Masters) level to reflect their AQF (Australian Qualifications Framework) level

CLO:	Keyword:	Bachelor of Science (AQF Level 7)	Doctor of Veterinary Medicine (AQF Level 9)
1	COMMUNICATION	Communicate appropriately and effectively with diverse stakeholders.	Communicate appropriately and effectively with diverse clients, colleagues and other stakeholders with empathy, compassion and respect, including in the context of a veterinary <i>consultation</i> (EPA1).
2	CLINICAL PROFICIENCY	Perform foundational veterinary diagnostic, therapeutic, surgical, and animal handling and examination procedures.	Perform entry-level veterinary diagnostic, therapeutic, and animal handling and examination procedures, including in the context of <i>surgery</i> (EPA6) and <i>anaesthesia</i> (EPA 7).
3	SPECIALISED KNOWLEDGE	Demonstrate and apply a broad and coherent body of knowledge of animal health, welfare and disease in a range of species, and One Health (public health and biosecurity) principles, within the broader contexts of veterinary work.	Demonstrate and apply highly specialised knowledge of health, welfare and disease in a range of animal species, and One Health (public health and biosecurity) principles, within the broader contexts of veterinary work.
4	PROBLEM-SOLVING	Gather and critically analyse information to solve and manage complex veterinary problems.	Gather and critically analyse information to solve and manage complex veterinary problems, including in the context of <i>diagnosis</i> (EPA2), <i>case management and care</i> (EPA3), <i>emergency response</i> (EPA4), and <i>promoting health</i> (EPA8).
5	RESEARCH	Systematically retrieve and synthesise evidence, apply scientific methods to independently investigate research questions in veterinary science, and disseminate findings.	Systematically retrieve and synthesise evidence, apply scientific methods to independently investigate specific research questions in veterinary science, and disseminate findings, including in the context of <i>evidence-based practice</i> (EPA5).
6	PROFESSIONAL CONDUCT	Consistently demonstrate the professional behaviours and attitudes expected in the veterinary profession, and uphold ethical, legal, and animal welfare responsibilities, including awareness of their own limitations.	Consistently demonstrate the professional behaviours and attitudes expected of a veterinarian, and uphold ethical, legal, and animal welfare responsibilities, including awareness of their own limitations.
7	PRODUCTIVE RELATIONSHIPS	Demonstrate <i>approaches to others</i> that foster productive relationships with diverse stakeholders, as part of a collaborative interprofessional team.	Demonstrate <i>approaches to others</i> that foster productive relationships with diverse clients and team members, to support delivery of relationship-centred care as part of a collaborative interprofessional team.
8	PSYCHOLOGICAL RESOURCES	Demonstrate <i>approaches to self</i> that foster psychological and social resources supporting resilience and sustainable engagement with the veterinary profession, including motivation, emotional competence, life balance, and adaptability.	Demonstrate <i>approaches to self</i> that foster psychological and social resources supporting resilience and sustainable engagement with the veterinary profession, including motivation, emotional competence, life balance, and adaptability.
9	PROFESSIONAL COMMITMENT	Demonstrate <i>approaches to work</i> that foster efficient professional practice, including workflow management, autonomy, diligence, and commitment.	Demonstrate <i>approaches to work</i> that foster efficient provision of high-quality care and professional practice, including workflow management, autonomy, diligence, and commitment.
10	REFLECTIVE DEVELOPMENT	Reflect on personal capabilities, actions and experiences, in support of lifelong independent learning and formation of a confident professional identity.	Reflect on personal capabilities, actions and experiences, in support of lifelong independent learning and formation of a confident professional identity.

Entrustable Professional Activities (EPAs) (modified after AAVMC CBVE EPAs v2)



	EPA	Description	Elements
1 CONSULTATION	1a Gather a history	Gather a complete history from a client during clinical rotations, tailored to the clinical situation and specific patient encounter.	Demonstrate empathy, compassion and respect to effectively communicate with the client. May be in the context of primary accession, referral and emergency cases.
	1b Perform an examination	Perform a complete physical examination of an individual animal, or of appropriate animals within a herd or group, tailored to the clinical situation and specific patient encounter.	The examination may also include ophthalmic, neurological, reproductive or orthopaedic examinations as required. This must take place in a clinical care setting and include appropriate and safe animal handling and approach to biosecurity.
	1c Create a prioritised differential diagnosis list	Using history and clinical data, develop a problem list, create a prioritised differential diagnosis list (for an individual or a group) and justify this prioritisation.	Must be in a clinical care setting.
2 DIAGNOSIS	Develop a diagnostic plan and interpret results (for an individual or group, including by necropsy)	Using individual animal or herd data, develop a diagnostic plan, perform diagnostics (as appropriate) and interpret results.	Justify interpretation of results and decision making, including cost-benefit analysis and clearly communicate the plan. This must be in a clinical context but may be communicated to a client or a clinician. May include necropsy.
3 CASE MANAGEMENT AND CARE	Develop a management, treatment or care plan (for an individual or group)	Using working diagnosis and client considerations develop a management, treatment or care plan (for an individual or group) for implementation.	Balance client needs (financial, emotional, logistical), ethical, legal and welfare factors. Develop the most appropriate plan using these limitations and justify decisions. May or may not include implementation of the plan.
4 EMERGENCY RESPONSE	4a Recognise biosecurity threat requiring urgent or emergent response and initiate evaluation and management	Recognise a biosecurity threat and develop a plan for evaluation and management.	Prioritise actions to minimise biosecurity risk. Communicate plan clearly with team members or other stakeholders. May or may not include implementation of the plan.
	4b Recognise and triage individual cases needing urgent care	Effectively recognise and triage individual cases needing urgent care.	Triage based on severity and focus urgent care on support of vital functions. Work calmly but effectively, communicating clearly with team members.

5 EVIDENCE-BASED PRACTICE	Formulate relevant questions and retrieve evidence to advance care	Retrieve and critically appraise evidence to explore a question or hypothesis related to a clinical case.	Must effectively communicate findings.
6 SURGERY	Perform a common surgical procedure on a stable patient, including pre-operative and post-operative management	Perform a surgical procedure, including pre-operative preparation of patient and self (surgeon), and post-operative care.	Demonstrate appropriate scrubbing, gowning, gloving, instrument and tissue handling, haemostasis, and wound closure. Ensure the animal is appropriately prepared for surgery (fasting, pre-surgery lab tests if required, checking identification and procedure, and client contact information). Plan and write post-operative care instructions. May include sterilisations, laceration or abscess repair, subcutaneous mass removal.
7 ANAESTHESIA	Perform general anesthesia and recovery of a stable patient including monitoring and support	Induce, maintain and recover a stable anaesthetic patient, including monitoring vital functions and providing supportive care. Evaluate patient status and determine a suitable anaesthetic and analgesic protocol.	Examine the animal pre-operatively and plan pre-medication, induction and maintenance of anaesthesia and peri-operative pain relief for a stable patient. Correctly set up and check the anaesthetic machine and appropriate breathing system, and prepare and check equipment for catheterisation, induction and intubation, monitoring, fluid therapy and warming. Plan and gather appropriate drugs and equipment for anaesthetic complications. Administer premedication, place an IV catheter, safely induce and maintain anaesthesia monitor animal clinically and using monitoring apparatus, recover and institute post-operative pain management. Recognise and respond to changes in the animal's anaesthetic depth and vitals during the procedure.
8 PROMOTING HEALTH	Formulate recommendations for preventive healthcare	Create a preventative healthcare plan, considering the animal/herd needs, clients' capabilities and the care setting, to optimise health and welfare and prevent spread of disease.	Develop recommendations for preventative healthcare that meets the client's needs and is tailored to the geographical location, local environment or lifestyle of the individual animal or group.

Day One Competencies

Murdoch CLO	RCVS Day One Competencies	AVBC Day One Competencies	AVMA / AAVMC CBVE Competencies	AQF Level 9
Communication <div>1</div>	(17) Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned. (20) Prepare accurate professional records and case reports, in a form appropriate to relevant audiences. (21) Communicate clearly and collaborate with referral, diagnostic and other professional services. (22) Obtain an accurate and relevant history of the individual animal or animal group, and its/their husbandry and environment.	(1) Obtain an accurate and relevant history of the individual animal or animal group and its/their management and environment. (25) Communicate effectively with clients, the public, professional colleagues, and responsible authorities, using language appropriate to the audience and context. (26) Maintain accurate, consistent, and contemporaneous records in a clinic database, which allows for case transfer and protects client privacy.	(AVMA 8b) communication skills including those that demonstrate an understanding and sensitivity to how clients' diversity and individual circumstance can impact health care. (1.1) Gathers and assimilates relevant information about animals. (5.1) Listens attentively and communicates professionally. (5.2) Adapts communication style to colleagues and clients. (5.3) Prepares documentation appropriate for the intended audience.	• communication and technical research skills to justify and interpret theoretical propositions, methodologies, conclusions and professional decisions to specialist and non-specialist audiences
Clinical proficiency <div>2</div>	(27) Handle and restrain animal patients safely and humanely, and instruct others in helping the veterinary surgeon perform these techniques. (28) Perform simple, elective surgeries in an aseptic fashion. (29) Perform a complete clinical examination relevant to presentation and context. (31) Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results. (32) Use diagnostic techniques and use basic imaging equipment and carry out an examination effectively as appropriate to the case. (33) Safely perform sedation, and general and regional anaesthesia; implement chemical methods of restraint. (34) Assess and manage pain. (42) Perform ante-mortem inspection of animals destined for the food-chain, including paying attention to welfare aspects; correctly identify conditions affecting the quality and safety of products of animal origin, to exclude those animals whose condition means their products are unsuitable for the food-chain.	(2) Handle, restrain and otherwise manage animal(s) safely and humanely, considering animal behaviour and welfare, and instruct others in helping the veterinarian perform these techniques. (3) Perform a complete clinical examination relevant to presentation and context. (5) Select appropriate diagnostic tests and techniques, including diagnostic imaging. Safely apply diagnostic techniques and safely collect, preserve and transport samples as applicable. Interpret results of diagnostics, accounting for their limitations. (10) Safely perform sedation and general and regional anaesthesia; implement chemical methods of restraint. (11) Perform routine procedures, including surgeries, identifying associated indications and contraindications and adjusting the procedures as indicated. (13) Assess and manage pain. (23) Perform antemortem and postmortem inspection of animals and make appropriate decisions to protect the food chain and animal welfare at the point of slaughter.	(AVMA 3) anesthesia and pain management, patient welfare. (AVMA 4) basic surgery skills and case management. (1.1b) Performs physical examination. (2.1) Performs veterinary procedures and post- procedural care.	
Expert knowledge <div>3</div>	(15) Demonstrate a basic knowledge of the organisation, management and legislation related to a veterinary business. (16) Promote health and safety of patients, clients and colleagues in the veterinary setting, including applying the principles of risk management to practice. (40) Recommend and evaluate protocols for biosecurity, and apply principles of biosecurity correctly, including sterilisation of equipment and disinfection of clothing. (44) Promote the health and safety of people and the environment. (45) Understand the principles and practice of the application of veterinary science to ensure food safety standards throughout the production chain, including performance of post-mortem inspection of food producing animals.	(18) Implement and advise stakeholders on practices that promote animal welfare for an animal or group of animals. (21) Use One Health principles in veterinary practice, promoting the health and safety of people and sustainability of the environment. (22) Develop, evaluate, recommend, and practise protocols for biosecurity, biosafety and infection prevention and control (IPC). (24) Apply veterinary elements of food safety standards and practices throughout the production chain, including on the farm and during food processing. (37) Demonstrate fundamental knowledge of the organisation, management, business principles, legislation related to veterinary business(es), and personal financial management. (38) Promote health and safety of patients, clients, colleagues and themselves in the veterinary setting, including applying risk management principles to practice.	(AVMA 7) understanding of health promotion, and biosecurity, prevention and control of disease including zoonoses and principles of food safety. (3.2) Recommends and evaluates protocols for biosecurity. (3.3) Advises stakeholders on practices that promote animal welfare. (4.2) Promotes the health and safety of people and the environment. (8.1) Weighs economic factors in personal and business decision-making.	• a body of knowledge that includes the extended understanding of recent developments in a discipline and its professional practice • cognitive skills to demonstrate mastery of theoretical knowledge and to reflect critically on theory and professional practice

Murdoch CLO	RCVS Day One Competencies	AVBC Day One Competencies	AVMA / AAVMC CBVE Competencies	AQF Level 9
Problem-solving <div>4</div>	(14) Adapt knowledge and skills to varied scenarios and contexts. (35) Recognise when euthanasia is appropriate and perform it humanely. (23) Develop appropriate treatment plans and administer treatment in the interests of the patient and with regard to the resources available and appropriate public health and environmental considerations. (24) Synthesises and prioritises problems to arrive at differential diagnoses. (25) Prioritise situational urgency and allocate resources. (30) Attend all species in an emergency and perform first aid. (36) Perform a systematic gross post-mortem examination, record observations. (37) Assess the physical condition, welfare and nutritional status of an animal or group of animals and advise the client on good practice of husbandry and feeding. (38) Recognise suspicious signs of possible notifiable, reportable and zoonotic diseases and take appropriate action, including notifying the relevant authorities. (39) Apply population principles in compliance with legal regulations and economic realities. (41) Advise stakeholders on practices that promote animal welfare. (43) Advise on, and implement, preventative programmes appropriate to the species and in line with accepted animal health, welfare and public health and environmental standards.	(4) Identify and prioritise problems to develop differential diagnoses and a diagnostic plan, then interpret clinical and diagnostic evidence to establish a diagnosis. (6) Develop appropriate treatment and preventive plans and administer appropriate treatments (7) Tailor the diagnostic, treatment, preventive, and control plans when providing veterinary services, considering animal welfare, client expectations and economic contexts. (9) Adapt and apply knowledge and skills to varied scenarios and contexts, including where information is incomplete. (12) Assess and triage animals in an emergency, perform first aid to stabilise the patient, and refer promptly to appropriate colleagues as needed. (14) Recognise when euthanasia is appropriate and perform it humanely and safely. (15) Perform a systematic, gross postmortem examination, with attention to personal and staff safety, and report findings. (16) Assess and advise, at individual and population levels, on clinical and production factors such as the physical condition, welfare, nutritional status, performance and associated management factors of an animal/ group of animals. (17) Apply principles of population medicine and epidemiological skills to investigate veterinary problems. (19) Recognise suspicious signs of reportable biosecurity risks (endemic, exotic and zoonotic diseases) and take appropriate action, including notifying the relevant authorities. (20) Advise on and implement preventive programs appropriate to the species.	(AVMA 1) comprehensive patient diagnosis (problem solving skills), appropriate use of diagnostic testing, and record management. (AVMA 2) comprehensive treatment planning including patient referral when indicated. (AVMA 5) basic medicine skills and case management. (AVMA 6) emergency and intensive care case management. (1.1) Gathers and assimilates relevant information about animals. (1.2) Synthesizes and prioritizes problems to arrive at differential diagnoses. (1.3) Creates and adjusts a diagnostic and/or treatment plan based on available evidence. (1.4) Incorporates animal welfare, client expectations, and economic considerations into the diagnostic or treatment plan. (1.5) Prioritizes situational urgency and allocates resources. (1.6) Adapts knowledge to varied scenarios and contexts. (2.2) Promotes comprehensive wellness and preventive care. (3.1) Applies population management principles in compliance with legal regulations and economic realities. (4.1) Recognizes zoonotic diseases and responds accordingly.	• cognitive, technical and creative skills to investigate, analyse and synthesise complex information, problems, concepts and theories and to apply established theories to different bodies of knowledge or practice
Research <div>5</div>	(3) Demonstrate the ability to critically review and evaluate evidence, in support of practising evidence based veterinary medicine. (5) Contribute as appropriate to the advancement of veterinary knowledge, in order to improve the quality of animal care and public health.	(8) Utilise traditional and digital technologies and information sources to inform patient care and manage health data. (39) Critically review and evaluate evidence from traditional and digital resources, aligned to evidence-based veterinary practice. (40) Contribute as appropriate to the advancement and dissemination of veterinary knowledge to improve the quality of animal care and public health.	(AVMA 9) critical analysis of new information and research findings relevant to veterinary medicine. (9.1) Evaluates health-related information (9.2) Integrates, adapts and applies knowledge and skills (9.3) Disseminates knowledge and practices to stakeholders	• knowledge of research principles and methods applicable to the discipline and its professional practice • cognitive, technical and creative skills to generate and evaluate complex ideas and concepts at an abstract level • technical and communication skills to design, evaluate, implement, analyse and theorise about developments that contribute to professional practice • plan and execute a substantial research-based project.

Murdoch CLO	RCVS Day One Competencies	AVBC Day One Competencies	AVMA / AAVMC CBVE Competencies	AQF Level 9
Professional conduct 	(1) Act professionally, as informed by the RCVS Code of Professional Conduct. (2) Act in a way that shows understanding of ethical and legal responsibilities, appropriately balancing competing interests. (4) Apply principles of clinical governance. (6) Apply the RCVS Ten Principles of Certification. (7) Prescribe and dispense medicines correctly and responsibly in accordance with legislation and latest guidance including published sheets. (8) Report suspected adverse reactions effectively. (10) Demonstrate self-awareness of personal and professional limits, and know when to seek professional advice, assistance and support. (16) Promote health and safety of patients, clients and colleagues in the veterinary setting, including applying the principles of risk management to practice. (26) Act professionally in complex situations.	(30) Act professionally and ethically, compliant with legal and regulatory requirements of the relevant veterinary statutory body. (31) Issue certificates, applying principles appropriate to the relevant veterinary statutory body. (32) Prescribe, dispense and use medicines correctly and prudently, including recording and reporting adverse reactions, in accordance with legislation and current prescription guidelines.	(AVMA 8a) ethical and professional conduct (1.7) Recognizes limitations of knowledge, skill and resources and consults as needed. (7.1) Adopts an ethical approach to meeting professional obligations. (8.2) Delivers veterinary services compliant with legal and regulatory requirements. (8.3) Advocates for the health and safety of patients, clients, and members of the team within the workplace.	
Productive relationships 	(18) Demonstrate inclusivity and cultural competence, and encourage diverse contributions within the workplace. (19) Work effectively as a member of a professional/ inter-professional team, fully recognising the contribution of each professional, and demonstrate an understanding of cognitive diversity.	(27) Demonstrate inclusivity and cultural competence and act to promote diversity in all elements of practice. (28) Work effectively as a member of a professional/ interprofessional team, fully recognising the contribution of each professional while promoting equity and inclusion. (29) Collaborate with external referral, diagnostic and other professional services, including providing an appropriate history and clear communication.	(6.1) Solicits, respects and integrates contributions from others. (6.2) Functions as leader or team member based on experience, skills and context. (6.3) Maintains ongoing relationship to provide continuity of collaborative effort. (6.4) Demonstrates inclusivity and cultural competence.	
Psychological resources 	(9) Demonstrate situational awareness through navigating and responding to the economic and emotional context in which the veterinary surgeon operates. (13) Demonstrate ability to manage in situations where information is incomplete, deal with contingencies, and adapt to change.	(38) Promote health and safety of patients, clients, colleagues and themselves in the veterinary setting, including applying risk management principles to practice.	(7.5) Attends to wellbeing of self and others.	
Professional commitment 		(36) Practise time management, including recognising the impact of time management on stakeholders and self.	(7.2) Practices time management.	Application of knowledge and skills: • with high level personal autonomy and accountability
Reflective development 	(11) Demonstrate a commitment to learning and professional development, including recording and reflecting on professional experience and other learning aimed at improving performance and competence. (12) Engage with self-audit and peer-group review processes in order to improve performance.	(33) Engage in self-directed learning, continuing professional development and career planning, acknowledging the need for selfcare in the context of maintaining competency. (34) Recognise limitations of knowledge, skills and resources, consult with colleagues as needed, and identify situations in which referral is warranted. (35) Reflect on personal actions, including inviting and responding to constructive feedback on performance.	(7.3) Reflects on personal actions. (7.4) Engages in self- directed learning and career planning.	Application of knowledge and skills: • with creativity and initiative to new situations in professional practice and/or for further learning

Skills List

CLO	EPA	Competency	Guidance
1	1a	★ Gather a case history	
	1c	★ Explanation and planning with a client	
	1c	★ Develop a cost estimate for a case	
	1c	★ Prepare a medical record	Including use of electronic record systems; writing referrals
2		● Perform hand hygiene	
		● Don and doff appropriate PPE	
		★ Approach, handle or restrain an animal	
		★ Identify or certify an animal	Including breed recognition; aging by teeth (horse, cow, sheep)
		● Assess an animal's behaviour and welfare status (condition, environment, stress, pain)	Including body scoring
		● Perform a subcutaneous injection	
		● Perform an intramuscular injection	
		● Perform an intravenous injection	
		○ Pass a nasogastric or stomach tube	Cow, sheep/camelid, horse (including by simulation)
		★ Administer an oral medication or drench	Including crop tubing of birds
		○ Place an intravenous catheter	Dog/cat, horse
		○ Administer oxygen therapy	Dog/cat, horse, bird
		○ Apply a bandage or limb support	Dog/cat, horse, bird
		★ Collect blood via peripheral vein	Jugular; cephalic, saphenous, tail vein (cow), ear vein (rabbit)
		● Create and interpret a blood smear	Including Diff-Quik staining; manual differential WBC
		● Perform and interpret PCV and TSP	
		○ Collect urine via cystocentesis	Dog/cat
		● Perform basic urinalysis	Including USG, dipstick and sediment observation
		● Perform and interpret faecal egg count	
		● Perform a Wood's lamp examination for dermatophytosis	
		○ Perform and interpret a skin scraping	Dog/cat
		● Collect and interpret an impression smear	
		○ Collect and interpret ear cytology	Dog/cat
		● Collect and interpret a fine needle aspirate sample	
		○ Collect and interpret vaginal exfoliative cytology	Dog/cat
		○ Collect milk sample	Cow
		○ Measure blood pressure	Dog/cat
		○ Perform and interpret an ECG	Dog/cat, horse
		● Perform diagnostic radiography	
		● Position a patient and perform thoracic radiography	
		● Position a patient and perform abdominal radiography	

CLO	EPA	Competency	Guidance
2		● Position a patient and perform skeletal radiography	
		○ Perform and interpret basic ultrasound examination	Dog/cat
		○ Perform and interpret focussed ultrasound assessment (aFAST or tFAST)	Dog/cat
		○ Perform and interpret transrectal reproductive ultrasound examination	Horse
		● Perform a dental examination	
		○ Perform a simple dental scale and polish	Dog/cat
		○ Remove a single-rooted tooth	Dog/cat
		○ Remove a multi-rooted tooth	Dog/cat
		★ Trim hooves or nails	Dog/cat, cow, sheep, bird
		○ Clip a bird's wings	
		○ Express anal sacs	Dog
		● Implant a microchip	
		● Perform biochemistry using benchtop analyser (including QC)	
		● Write a drug prescription	
	1b	★ Perform a clinical examination	Including antemortem inspection for food-chain
	1b	○ Perform a lameness examination	Dog/cat, horse, cow
	1b	○ Perform a neurological examination	Dog/cat
	1b	○ Perform an ophthalmic examination	Dog/cat
	1b	○ Perform an otoscopic examination	Dog/cat
	1b	○ Perform a pregnancy examination	
	1b	○ Perform a reproductive examination - male/female	Bull/cow
	6	● Prepare for aseptic surgery	Including scrub/gown/glove, aseptic technique, instrumentation
	6	● Perform a surgical procedure	
	6	● Perform laparotomy including body wall closure	
	6	● Perform castration*	
	6	○ Perform ovariohysterectomy*	Dog/cat. *All students perform a spay or castration
	6	● Perform cystotomy	
	6	● Perform gastrotomy/enterotomy	
	6	● Perform basic wound management	Including stitch-up, debridement, drainage
	6	● Perform a lump removal	
	7	● Plan a sedation or anaesthetic	Including pre-anaesthetic exam, scheduled drugs
	7	● Set up and operate an anaesthetic machine	
	7	● Induce and maintain general anaesthesia	Including monitoring, recording, recovery; manage complications
	7	○ Perform endotracheal intubation	Dog/cat
	7	● Plan peri- and post-operative analgesia	Including dose calculation, managing scheduled drugs
	7	○ Perform local or regional anaesthesia	Including dental blocks (dog), regional nerve blocks (horse, cow)

CLO	EPA	Competency	Guidance
4	1c	★ Develop a problem list	
	2	★ Develop a diagnostic plan	Refer to Master Problem List
	2	● Perform and interpret a necropsy	Dog/cat, sheep, pig, bird. Including sampling and ancillary tests
	2	● Interpret laboratory results	
	2	● Interpret haematology results	
	2	● Interpret urinalysis results	
	2	○ Interpret milk sample results	Cow
	2	● Interpret a cytological report	
	2	● Interpret a histopathology report	
	2	● Interpret a radiograph	
	2	● Interpret a medical imaging report	
	3	★ Develop a management, treatment or care plan	For individual, group or population. Refer to Master Problem List
	3	● Calculate +/- prepare a drug dose	
	3	● Develop a fluid therapy plan	
	3	● Develop a feeding or nutritional plan	
	3	● Develop an antimicrobial protocol	
	3	● Develop an antiparasitic protocol	
	3	● Plan +/- perform euthanasia	Including humane slaughter, captive bolt, verification of death
	4b	● Triage urgent or emergency presentations	
	4b	● Perform first aid	Including stabilising an unstable patient
	4b	● Perform CPR	Dog/cat. Including simulation
5	4a	★ Triage, identify and manage suspected zoonotic disease	Including simulation
	4a	● Triage, identify and report suspected notifiable/reportable or emergency disease	Cow, sheep, pig. Including simulation
	8	★ Formulate recommendations for preventive healthcare	Including husbandry, nutrition, vaccination, welfare, productivity
	5	● Retrieve and appraise information to inform evidence-based practice	

MASTER PROBLEM LIST

CARDIORESPIRATORY

- Abnormal heart sounds
- Abnormal heart rate or rhythm
- Pulse abnormality
- Syncope
- Hypertension
- Shock
- Abnormal breathing (dyspnoea/tachypnoea)
- Respiratory noise (stridor)
- Coughing
- Nasal discharge or sneezing
- Nasal bleeding (epistaxis)
- Subcutaneous bleeding (ecchymoses/petechiae)

NEUROLOGICAL

- Ataxia
- Head tilt or nystagmus
- Paralysis / paresis
- Tremors or twitching
- Seizures
- Abnormal behaviour
(aggression, aversive, anxiety, fear)
- Stupor / coma / abnormal mentation
(e.g. circling, head pressing)

GASTROINTESTINAL

- Abdominal pain
- Diarrhoea
- Jaundice
- Gagging / dysphagia
- Faecal blood (melaena / haematochezia)
- Vomiting / regurgitation
- Straining
(constipation/tenesmus/dyschezia/faecal incontinence)
- Dental and oral disease
- Halitosis

DERMATOLOGICAL

- Alopecia
- Nodules / non-healing wounds / fistulous tracts
- Pruritus
- Skin ulcers or erosions
- Ear disease
- Claw and digit disease

UROGENITAL

- Urinary frequency / straining
(dysuria/stranguria/pollakiuria)
- Red urine (haematuria/hemoglobinuria/myoglobinuria)
- Reduced urine output (oliguria/anuria)
- Preputial discharge
- Vulval discharge
- Polyuria/polydipsia
- Urinary incontinence

REPRODUCTIVE

- Abortion
- Dystocia
- Infertility
- Breeding evaluation or intervention
- Prolapse
- Mastitis

MUSCULOSKELETAL

- Lameness
- Joint swelling
- Spinal pain
- Limb deformity

OCULAR

- Eye discharge
- Eye pain
- Vision loss
- Eye deviation (strabismus)
- Pupil abnormality (anisocoria/miosis/mydriasis)
- Blue/red eye

GENERAL/SYSTEMIC

- Abdominal distension
- Polyphagia
- Weight loss or ill-thrift (+/- anorexia)
- Weight gain
- Pallor
- Ptyalism
- Pyrexia
- Weakness or collapse
- Exercise intolerance / poor performance
- Lymphadenopathy
- Sudden death

INJURIES, SWELLINGS & LOCAL INFECTIONS

- Trauma
- Snake bite
- Wounds
- Abscesses
- Lumps / swellings

NEONATAL

- Abdominal distension
- Weakness / collapse
- Hypothermia
- Failure to nurse

PREVENTION AND MANAGEMENT

- Zoonotic risk
- Biosecurity risk / reportable disease
- Food chain risk
- Welfare concern
- Preventative healthcare plan