

MURDOCH UNIVERSITY – SCHOOL OF VETERINARY MEDICINE

INHERENT REQUIREMENTS FOR ACHIEVEMENT OF VETERINARY COURSE (BSc/DVM) LEARNING OUTCOMES

Inherent requirements are the essential components of a course that demonstrate the abilities, attributes or qualities needed in order to achieve the course learning outcomes, while preserving the academic integrity of learning, assessment and accreditation processes.

The School is committed to diversity, equity and inclusion and endeavours to accommodate all people wishing to become veterinarians. The School welcomes and encourages applications from students with disabilities, and from diverse social and cultural backgrounds. Where there are factors that impact on a student's ability to meet the inherent requirements, the School and University may make reasonable adjustments to assist the student to fully participate in the course and to meet essential course learning outcomes. Reasonable adjustments must not fundamentally change the nature of the inherent requirement, compromise the academic integrity of the course, or create risk to human or animal safety.

The Murdoch BSc/DVM course is accredited by a number of bodies including the Australasian Veterinary Boards Council (AVBC) and American Veterinary Medical Association (AVMA), whose accreditation is further recognised by other bodies globally. These bodies define a number of essential competencies that must be achieved by all students prior to graduation. Veterinary registration is 'global', meaning an avowed intention of a student to practice only a narrow part of clinical medicine, or to pursue a non-clinical career, does not alter the requirement that all students must achieve all required competencies, for all relevant animal species.

Successfully completing the Murdoch BSc/DVM course enables veterinary registration in a number of jurisdictions globally, most proximately with the Veterinary Practice Board of Western Australia as enabled by the Veterinary Practice Bill 2021. As such, and because veterinary training mandates work-integrated learning in clinical environments covered by legislated professional requirements, the requirements for professional registration and professional conduct influence the inherent requirements for the undergraduate course.

Parts of the BSc/DVM course, including mandatory work-integrated learning placements, take place at clinical sites off-campus where it may not be possible for either the University or placement host to make the same reasonable adjustments that are possible in University-controlled environments.

How to read the inherent requirement statements

If you are intending to enrol in the BSc/DVM course, you should look at these inherent requirement statements and accompanying examples and think about whether you may experience challenges in meeting these requirements.

If you think you may experience challenges for any reason including a disability or chronic health condition, you should discuss your concerns with an advisor within [Murdoch University's Access and Inclusion department](#). These staff will work collaboratively with you, and the Academic Chairs as required, to determine whether reasonable adjustments can be made to assist you to meet the inherent requirements. In the case where it is determined that inherent requirements cannot be met with reasonable adjustments, University staff can provide guidance regarding other study options.

1. COMMUNICATION

CLO1: Communicate appropriately and effectively with diverse clients, colleagues and other stakeholders with empathy, compassion and respect, including in the context of a veterinary consultation (EPA1).

Notes on this CLO: Communication is an essential competency for a veterinarian and is consistently rated as one of the most important veterinary skills. All instruction at Murdoch University is in English and all the requirements below refer to the English language. English language requirements for course admission are mandated by the accrediting body Australasian Veterinary Boards Council, and by State legislation (Veterinary Practice Bill 2021) which requires that veterinarians are “sufficiently proficient in the English language, both written and oral, to practise veterinary medicine competently and safely”.

Inherent requirements likely to be required to achieve **CLO1 - Communication**:

- a) **Hearing**: capacity to receive and comprehend spoken English at conversational speed, including in noisy environments.
Example: taking a history from a client during a consultation, participating in group discussions in a large classroom, receiving instructions from a team member during an emergency or in a noisy environment such as surgery group practical classes
- b) **Speech**: capacity to elicit, respond to and present information, to allow clear two-way exchange of information and discussion at conversational speed.
Example: provide a client with clear instructions and check they have understood; conduct a field interview of a farmer; completing a communication skills scenario role-play for assessment (in person or video recording)
- c) **Observation**: capacity to perceive, interpret and respond to non-verbal cues in communication, to enable sensitive and respectful communication.
Example: recognising a distressed or angry client, demonstrating respect for personal space
- d) **Literacy (reading and writing)**: capacity to read and comprehend information presented in a variety of formats in English, to record information accurately and legibly, make coherent notes and complete written assessment tasks in English.
Example: hand-written clinical notes, test results, graphical formats such as charts, journal articles and digital information; record patient information, write case reports; laboratory and/or field data collection
- e) **Empathy and respect**: capacity to communicate respectfully and empathically with people of different gender, sexuality and age, and from diverse cultural, religious, socio-economic and educational backgrounds, and to respond to emotion in an appropriate way.
Example: communicating with a client or colleague from a very different cultural background or different cultural perspectives, e.g. on animal ownership; responding appropriately to an owner in emotional distress; attending a practicum placement in an unfamiliar socioeconomic environment, such as a rural farm setting typical of Australian animal industry

2. CLINICAL PROFICIENCY

CLO2: Perform veterinary diagnostic, therapeutic, and animal handling and examination procedures, including in the context of *surgery (EPA6)* and *anaesthesia (EPA7)*.

Notes on this CLO: Successful completion of the BSc DVM program allows for registration as a veterinarian nationally and internationally. Veterinary registration in Australia is “global”, meaning that veterinarians are expected to be able to competently examine and treat all relevant species. Veterinary medicine is an animal-based course and working closely with domestic animal species is unavoidable. All students must be able to safely handle and restrain large animals including sheep, cows, pigs and horses, even if they never intend to work with these species after graduation. WA State legislation (Veterinary Practice Bill 2021) requires that veterinarians have “sufficient physical and mental capacity to practise veterinary medicine competently and safely”.

Inherent requirements likely to be required to achieve **CLO2 – Clinical Proficiency**:

a) **Sensory ability**

Visual – sufficient visual acuity to interpret visual data, perform visual examinations and observations as required for diagnosis, animal care and safety

Example: interpreting radiographs in a darkened room; examining an animal’s eye or ear using an ophthalmoscope or otoscope; using a microscope; assessing an animal’s appearance, behaviour or movement; reading the label on a drug bottle or packaging; interpret colour changes in a diagnostic test

Auditory – sufficient auditory acuity to receive and interpret auditory clinical data, in clinical environments.

Example: auscultation with a stethoscope or equivalent device to assess heart and lung sounds

Tactile – sufficient tactile ability to interpret and respond to tactile data as required for diagnosis and animal care

Example: abdominal palpation of a dog; rectal palpation of a pregnant cow; detecting changes in a patient’s peripheral pulse; careful handling of delicate tissues in surgery

b) **Mobility** – sufficient mobility and equilibrium to maintain a standing position while using both hands and upper limbs to perform a manual task; to manoeuvre, twist or bend around obstacles and in confined spaces or on uneven ground.

Example: moving and manoeuvring appropriately to maintain the safety of self and others whilst performing clinical procedures on a potentially dangerous animal such a horse or cow; e.g. manoeuvring around equipment and other veterinary staff to safely administer treatment to a horse in a box stall; doing standing procedures such as rectal palpation of a cow; working with animals in animal containment yards

c) **Gross motor strength** – sufficient ability to engage in lifting, moving or restraining animals, either manually or with appropriate aids, as required for animal treatment and care.

Example: physically restraining and examining large and small animals; safely lifting a 20kg dog; manoeuvring a 50kg sheep into the shearing position; restraining the head of a cow in a head bail; pushing a cow into a crush; controlling a horse led by a halter

- d) **Fine motor skills** – sufficient fine motor skills to perform skilled or delicate veterinary procedures.
Example: carefully manipulating delicate tissues with instruments in surgery; suturing and tying surgical knots with fine suture materials; carefully inserting needles into small target sites without shaking (e.g. cerebrospinal fluid collection)
- e) **Physical stamina and concentration** – sufficient physical stamina and concentration to persist with or repeat time-dependant tasks over appropriate periods, which may be prolonged in some circumstances; sufficient self-awareness of own physical and psychological state to manage workload accordingly.
Example: remain in position and ‘scrubbed in’ to a sterile surgery for 3-4 hours; walking around the hospital floor for a whole morning without sitting down to rest and without risk of fainting; occasionally undertaking weekend and after-hours duties
- f) **Capacity to work closely with live and dead animals** – sufficient behavioural and emotional stability and physical capacity to work closely with domestic and pet animal species and in animal and outdoor environments, without impairment or innate risk (e.g. unmanageable allergies, immune compromise, inherent zoonotic risk, fears/phobias).
Example: handling a live chicken or horse without exhibiting phobias; dissecting or performing a necropsy on a dead dog; collecting semen from a horse; fully inserting a gloved arm into a cow’s rectum, or a gloved finger into a dog’s rectum; hosing out faeces from a concrete cattle pen
- g) **Communication** – see 1a, 1b
Example: quickly exchanging information or instructions with a colleague or supervisor during a surgical procedure
- h) **Health and safety** – capacity to identify risk of injury and meet all essential health and safety requirements, including use of personal protective equipment, asepsis and infection control protocols, and immunisation requirements.
Example: scrubbing hands and forearms for 2 minutes with disinfectant solution; wearing a sterile gown and face mask for hours without touching non-sterile areas; wearing overalls and steel-capped boots; being vaccinated against tetanus and Q-fever

3. EXPERT KNOWLEDGE

CLO3: 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.

Notes on this CLO: Veterinary science is an academically demanding course with a very large required knowledge base, some of which must be remembered in a time-sensitive context (i.e.as assessed in ‘closed book’ timed assessment) to ensure safety and essential competency. WA State legislation (Veterinary Practice Bill 2021) requires that veterinarians have “sufficient physical and mental capacity to practise veterinary medicine competently and safely”.

Inherent requirements likely to be required to achieve **CLO3 – Expert Knowledge:**

- a) **Cognition** – sufficient cognitive capacity to gather, comprehend, understand, appraise, integrate and organise information from a variety of sources (written, digital, auditory, visual, spoken) to make appropriate clinical judgments.
Example: use available evidence to develop and assess treatment options and compare their respective merits
- b) **Memory** – accurately retain and recall essential information without a reference or memory aid.
Example: remembering drug interactions and contraindications, emergency drug doses, anatomical landmarks, procedural protocols
- c) **Literacy (reading and writing)** – see 1d
Example: reading a chapter of a specialised textbook; writing a 2000 word specialised report for a written assessment task
- d) **Speech and hearing** – see 1a, 1b
Example: demonstrating knowledge and understanding through an oral communication task in an OSCE

4. PROBLEM SOLVING

CLO4: Gather and critically analyse information to solve and manage complex veterinary problems, including in the context of *diagnosis (EPA2), case management and care (EPA3), emergency response (EPA4), and promoting health (EPA8)*.

Notes on this CLO: The ability to solve complex problems related to health and welfare may be viewed as the primary role of the veterinarian, and is the focus of much assessment across the course. Veterinary practice is governed by legislation and Codes requiring decisions to be consistent with peer-determined standards of competence and ethical and professional conduct.

Inherent requirements likely to be required to achieve **CLO4 – Problem Solving:**

- a) **Numeracy** – sufficient numeracy skills to deliver safe and effective delivery of veterinary care, and to investigate data associated with veterinary problems.
Example: determining safe and accurate medication dosages, anaesthetic protocols, fluid therapy protocols, food rations; laboratory and/or field data collection; successfully conduct data and statistical analysis of clinical or production records.
- b) **Literacy (reading and writing)** – see 1d
Example: interpreting hand-written clinical notes, test results, specialist reports, journal articles, digital case information; recording patient information, writing case reports; completing written assessments.
- c) **Speech and hearing** – see 1a, 1b
Example: explaining a healthcare or treatment plan to a client

d) **Cognition** – see 3a

Example: solving a complex problem requiring appraisal and integration of information from multiple sources

e) **Ethical behaviour** – see 6b

Example: balancing complex needs including owner preferences, financial constraints, animal welfare, and personal competency/limitations in developing diagnosis and treatment plans.

5. RESEARCH

CLO5: 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 evidence-based practice (EPA5).

Notes on this CLO: Designation of the BSc/DVM degree course at AQF Level 9 requires development of high-level cognitive, technical and creative skills to generate and evaluate complex ideas and concepts at an abstract level, and to plan and execute a substantial research-based project.

Inherent requirements likely to be required to achieve **CLO5 – Research**:

a) **Cognition** – see 3a

Example: practising evidence-based medicine through critically evaluating veterinary literature and data to make appropriate clinical judgments.

b) **Literacy (reading and writing)** – see 1d

Example: writing a critical appraisal of management of a clinical case, sourcing information from specialised veterinary literature

c) **Numeracy** – see 4a

Example: conducting a statistical analysis of clinical or production records using computer software

d) **Ethical behaviour** – see 6b

Example: always and without compromise maintaining standards of animal welfare

6. PROFESSIONAL CONDUCT

CLO6: 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.

Notes on this CLO: WA State legislation (Veterinary Practice Bill 2021) requires that a veterinarian must be “a fit and proper person to hold registration” and “of good fame and character”, including criminal history and compliance with relevant laws, regulations and Acts. Prescribed examples of unprofessional conduct include conviction of offences under veterinary-related Acts, conviction of an indictable offence punishable by imprisonment for more than one year, practicing veterinary medicine

while impaired by alcohol or drugs, and falsification of documentation. Prospective applicants with a criminal history or history of non-compliance with relevant laws or Acts relevant to veterinary practice (including in other countries), or drug or alcohol dependency should seek advice on their eligibility for professional registration. Some jurisdictions (e.g. RCVS in the UK) may require disclosure of lesser or non-criminal offences (e.g. cautions, convictions, adverse findings) at registration.

Inherent requirements likely to be required to achieve **CLO6 – Professional Conduct**:

- a) **Professional behaviour** – sufficient capacity for behavioural self-awareness and self-management to enable compliance with codes of conduct, and to facilitate safe and competent interactions and relationships, and maintain a safe environment for people and animals. Required behaviours include honesty, integrity, confidentiality, compassion, respect for others, collegiality; required values include commitment to competence, lifelong learning, and service of the public good.
Example: demonstrating integrity, courtesy and honesty in dealing with staff, peers and clients, even in stressful, emotional or morally-demanding scenarios; being able to dress and present in an appropriate manner that does not offend or affront other people; managing social media use (including indelible social media history) to maintain a professional public-facing image
- b) **Ethical behaviour** – capacity to respect the perspectives, interests and rights of other people and animals, and the moral capacity to adhere to recognised societal values and peer-determined expectations of behaviour, conduct and decision-making.
Example: managing confidential information appropriately in classroom and clinical settings; being always honest, including admitting fault even if negatively impacted
- c) **Behavioural stability** – sufficient behavioural stability to work effectively and constructively with other people and with animals in a range of clinical and academic settings.
Example: working effectively and staying calm and polite, even in a stressful or emotionally-taxing clinical setting; not making sudden violent movements or loud noises around animals
- d) **Awareness of limitations** – sufficient self-awareness of own competency and limitations, to ensure safe clinical practice.
Example: admitting the limits of your own clinical competency and seeking help from staff or supervisors
- e) **Legal** – uncompromising compliance with all relevant laws, acts, regulations and professional codes and standards.
Example: never falsifying medical records, documents or certificates, even if pressured by an unscrupulous person to do so
- f) **Absence of impairment** – absence of any impairment, dependency or compulsion with potential to compromise safety or competency.
Example: never attending classes or placements impaired by alcohol, illicit or prescription drugs; admitting to any dependency and seeking professional help

7. PRODUCTIVE RELATIONSHIPS

CLO7: Demonstrate approaches to others that foster productive relationships with diverse clients and team members, to support delivery of relationship-centred care as part of a collaborative interprofessional team.

Notes on this CLO: Most forms of veterinary practice require veterinarians to work effectively with other members of a team, and with diverse members of the public (e.g. clients); provision of quality care relies on the efficacy of these relationships.

Inherent requirements likely to be required to achieve **CLO7 – Productive Relationships**:

- a) **Social/interpersonal skills** – sufficient social/interpersonal skills to work closely with other people, build positive relationships and work sensitively and effectively in academic, community and clinical team settings.
Example: working effectively and respectfully in a clinical team providing animal care; working amicably and constructively with a group of students on a group assessment
- b) **Communication** – see 1a, 1b, 1c
Example: responding to verbal and non-verbal cues in communication, to enable sensitive and respectful interactions with an unfamiliar person
- c) **Empathy and respect** – see 1e
Example: understanding and appreciating a wide range of cultural perspectives on animal ownership and use; responding appropriately to an animal owner in distress.
- d) **Ethical and professional behaviour** – see 6a, 6b
Examples: demonstrating integrity, courtesy and honesty in dealing with staff, peers and clients to facilitate effective teamwork in a clinical setting.
- e) **Behavioural stability, including absence of impairment** – see 6c, 6f
Example: working effectively and staying calm and polite, even in a stressful or emotionally-taxing clinical setting

8. PSYCHOLOGICAL RESOURCES

CLO8: Demonstrate approaches to self that foster psychological and social resources supporting resilience and sustainable engagement with the veterinary profession, including motivation, emotional competence, life balance, and adaptability.

Notes on this CLO: Research has identified that veterinarians may be exposed to elevated risk of compassion fatigue, moral distress, mental health problems and suicide. Veterinarians are required to regularly handle lethal substances in their work. WA State legislation (Veterinary Practice Bill 2021) requires that veterinarians have “sufficient physical and mental capacity to practise veterinary medicine competently and safely” and must be free of any impairment, including psychological impairment, that may place a person or animal at risk.

Inherent requirements likely to be required to achieve **CLO8 – Psychological Resources:**

- a) **Emotional competence** – sufficient ability to recognise, regulate and respond to emotions in self and others, to enable effective communication and teamwork, and to remain appropriately calm, civil and respectful even in challenging clinical situations.
Example: responding appropriately in a challenging encounter with a sad, distressed or angry client
- b) **Resilience** – sufficient ability (with appropriate contextual supports) to cope, maintain equilibrium and function without impairment in the face of the stresses, emotional challenges and competing demands typical of veterinary training environment and workplaces.
Example: coping with witnessing the death or humane euthanasia of a loved pet, demonstrating healthy self-care behaviours
- c) **Adaptability** – sufficient adaptability to cope with change and ambiguity, in diverse, unpredictable and challenging academic and clinical environments.
Example: dealing with sudden emergencies or unplanned changes in schedule
- d) **Help-seeking behaviour** – sufficient self-awareness to recognise and manage or seek help for any impairment, including psychological impairment, with the potential to affect competency or the safety of people or animals.
Example: taking responsibility for physical and mental health, and seeking professional help (e.g. from a doctor or counsellor) if recognising possible impact on ability to function safely or competently
- e) **Behavioural stability, including absence of impairment** – see 6c, 6f
Example: working effectively and staying calm and polite, even in a stressful or emotionally-taxing clinical setting

9. PROFESSIONAL COMMITMENT

CLO9: Demonstrate approaches to work that foster efficient provision of high-quality care and professional practice, including workflow management, autonomy, diligence, and commitment.

Notes on this CLO: Designation of the BSc/DVM degree course at AQF Level 9 requires development of a high level of personal autonomy and accountability. WA State legislation (Veterinary Practice Bill 2021) defines unprofessional conduct as the practice of veterinary medicine in a manner or extent that falls short of reasonable standards of competence, diligence and safety.

Inherent requirements likely to be required to achieve **CLO9 – Professional Commitment:**

- a) **Diligence and commitment** – sufficient persistence of effort, attention and commitment to sustain delivery of quality clinical care by actively engaging in all aspects of a clinical case, under conditions appropriate to veterinary practice.
Example: completing all patient care, researching of a case and medical records in a period deemed appropriate to clinical practice i.e. before completing a shift

- b) **Workflow management** – sufficient organisational and time management skills and motivation to enable completion of clinical and assessment tasks in a timely manner, particularly those which impact upon the workflow of others.
Example: timely contribution to group assessments; organising and sterilising equipment before a surgery practical class; managing complex timetabling and assessment requirements.
- c) **Autonomy** – sufficient capacity to work independently when required, including sourcing and interpreting information.
Example: independent conducting a literature search as part of clinical problem solving.
- d) **Physical stamina and concentration** – see 2e
Example: maintaining sustained effort until a prolonged task is fully complete, e.g. cleaning up after a long surgical procedure

10. REFLECTIVE DEVELOPMENT

CLO10: Reflect on personal capabilities, actions and experiences, in support of lifelong independent learning and formation of a confident professional identity.

Notes on this CLO: Reflective practice is recognised as an essential and fundamental process which is foundational to enabling professional competency.

Inherent requirements likely to be required to achieve **CLO10 – Productive Relationships:**

- a) **Self-awareness** – sufficient self-awareness of own cognitive, psychological, social, physical and skill-set limitations and strengths, to enable self-directed learning to improve and build upon capabilities to continuously ensure competency and quality of care.
Example: reflecting on performance in a communication exercise with a simulated client and setting personal goals for improvement
- b) **Reflective practice** – sufficient capacity to regularly reflect on own actions, interactions and experiences, in a positive and constructive manner, with the goal of continual improvement to ensure competency and quality of care.
Example: reflecting upon management of a case, researching the case further, consulting and discussing the case with colleagues; being receptive to constructive feedback, even if negative