

Essential and Recommended Tasks List

- Regular font text denotes didactic (knowledge-based) skills.
- *Italicized* text denotes hands-on (psychomotor) skills. Students are expected to physically perform these skills.
- Recommended (i.e. not essential) tasks are denoted by (NE).
- Skills indicated by the designation (GROUP) may be performed by a group of program students. The appropriate size of the group will be determined by the task being performed taking into account humane treatment of the subject animal. Each member of the group must play an active role in the completion of the task.

Instruction must be provided in all Essential Tasks. Show where, when and by whom this instruction is provided.

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| OFFICE AND HOSPITAL PROCEDURES AND CLIENT RELATIONS | | |
| Make appointments | | |
| Demonstrate telephone etiquette | | |
| Admit and discharge patients, take history | | |
| Create and maintain client/patient records; prepare appropriate forms and certificates | | |
| Perform basic veterinary medical record keeping procedures: <ul style="list-style-type: none"> • Develop computer skills • Be able to utilize common management software programs • Be familiar with veterinary on-line services | | |
| Perform basic filing of medical records, radiographs, lab reports, etc. | | |
| Maintain x-ray, surgery, anaesthesia, radiology, laboratory and controlled substance logs | | |
| Recognize and respond appropriately to veterinary medical emergencies | | |
| Maintain basic cleanliness and orderliness of a veterinary facility (including hospital, clinic, practice, or laboratory) | | |

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| COMMUNICATION | | |
| Develop effective client communication skills: <ul style="list-style-type: none"> • Apply understanding of interpersonal skills and team dynamics in all aspects of the veterinary health care team • Utilize appropriate interpersonal and public relations skills • Recognize the legality of the veterinary-client-patient relationship • Develop and provide client education in a clear and accurate manner at a level the client understands (i.e., oral and written form, including educational handouts) • Apply crisis intervention/grief management skills with clients • Understand and observe legal boundaries of veterinary health care team members • Interact professionally with clients and fellow staff members • Demonstrate a commitment to high quality patient care • Respect and protect the confidentiality of client and patient information | | |
| Apply knowledge of provincial, federal, and local animal welfare regulations | | |
| Explain inadvisability of keeping wildlife as pets (NE) | | |
| Write business letters and reports | | |
| PHARMACY AND PHARMACOLOGY | | |
| Recognize general types and groups of drugs, their uses and clinically relevant side effects. | | |
| Demonstrate understanding of regulations governing over-the-counter and prescription drugs and controlled substances. | | |
| Dispense medications from written and verbal orders | | |
| Use weights and measures correctly | | |
| Calculate dosages | | |
| Store, safely handle and dispose of biologics and therapeutic agents, pesticides and | | |

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| hazardous wastes | | |
| Handle controlled substances correctly | | |
| Perform inventory control procedures | | |
| Prepare medications & reconstitute vaccines | | |
| Differentiate between abnormal and normal responses to medication | | |
| Use and explain appropriate routes and methods of drug and vaccine administration | | |
| EXAMINATION ROOM PROCEDURES | | |
| Recognize common domestic animal species and breeds | | |
| Know normal values of temperature, pulse and respiration for dog, cat, horse and cow | | |
| <i>Obtain accurate patient data (temperature, pulse and respiration) for dog, cat, horse and cow</i> | | |
| <i>Auscultate heart and lungs (dog, cat, horse and cow)</i> | | |
| <i>Restrain small animals:</i> <ul style="list-style-type: none"> • <i>Place in, and remove small animals from cages</i> • <i>Apply dog safety muzzle</i> • <i>Apply Elizabethan collar</i> • <i>Apply restraint pole (GROUP)</i> • <i>Restrain small animals for procedures</i> | | |
| <i>Restrain horses:</i> <ul style="list-style-type: none"> • <i>Halter, tie and lead horses</i> • <i>Apply twitch (GROUP)</i> | | |
| <i>Restrain cattle:</i> <ul style="list-style-type: none"> • <i>Apply bovine halter</i> • <i>Apply bovine tail restraint</i> • <i>Apply nose tongs/leads (NE)</i> | | |
| <i>Safely operate cattle chute (GROUP)</i> | | |
| <i>Restrain sheep and swine (NE)</i> | | |
| SURGICAL NURSING AND ANESTHESIA | | |
| Perform Surgical Preparations | | |
| <i>Prepare surgical equipment/supplies</i> | | |
| <i>Sterilize instruments & supplies using appropriate methods</i> | | |
| Identify and know proper use for instruments | | |
| Identify common suture materials, types and size | | |
| <i>Prepare gowns, masks, gloves and drapes</i> | | |
| <i>Prepare surgical sites using aseptic techniques</i> | | |
| <i>Operate & maintain autoclaves</i> | | |

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| <i>Provide operating room sanitation & care</i> | | |
| <i>Position patients (common procedures)</i> | | |

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| Perform as Surgical Assistant or Circulating Nurse | | |
| <i>Properly pass instruments and supplies</i> | | |
| <i>Maintain proper operating room conduct and asepsis</i> | | |
| <i>Assist with care of exposed tissues and organs</i> | | |
| Keep operative records | | |
| Operate/maintain/suction and cautery machines | | |
| Operate and maintain fibre optic equipment | | |
| Perform Post-Surgical Procedures | | |
| <i>Perform post-surgical clean-up</i> <ul style="list-style-type: none"> • <i>Equipment</i> • <i>Surgical room or area</i> • <i>Instruments</i> • <i>Patient</i> • <i>Personnel</i> • <i>Proper disposal of hazardous medical waste</i> | | |
| Provide post-operative care: <ul style="list-style-type: none"> • <i>pain management</i> • <i>wound management</i> • <i>discharge instructions</i> • <i>suture removal</i> | | |
| <i>Maintain and operate anesthetic delivery and monitoring equipment:</i> <ul style="list-style-type: none"> • <i>pulse oximeter</i> • <i>esophageal stethoscope</i> • <i>electrocardiograph (e.g., recognize abnormal rhythms/audible sounds, properly apply leads)</i> • <i>anesthetic machines, including rebreathing systems, non-rebreathing systems, induction chambers and masks</i> • <i>endotracheal tube</i> • <i>ambu bag</i> • <i>scavenging systems</i> • <i>oxygen sources</i> • <i>respiratory monitors</i> • <i>blood pressure monitoring devices</i> • <i>laryngoscopes</i> • <i>ventilator (NE)</i> • <i>defibrillator (NE)</i> | | |

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| Assist with Anaesthesia under Supervision | | |
| Calculate dosages of anesthetic-related drugs | | |
| <i>Administer anesthetic-related drugs by</i> <ul style="list-style-type: none"> • <i>Injection</i> • <i>Mask</i> • <i>Induction chamber</i> • <i>Endotracheal tube</i> | | |
| <i>Perform endotracheal intubation</i> | | |
| <i>Maintain general anesthesia</i> | | |
| <i>Use clinical signs and monitoring equipment to monitor patient status in all stages of anesthesia</i> | | |
| Evaluate patient and implement and evaluate pain management protocols | | |
| <i>Recognize anaesthetic emergencies and perform resuscitation procedures</i> Calculate and administer anesthetic antagonists Calculate and administer other emergency drugs <i>Perform CPR on appropriate animal models</i> | | |
| LARGE AND SMALL ANIMAL NURSING | | |
| <i>Provide routine record-keeping, care, and observation of hospitalized patients</i> | | |
| Demonstrate understanding of permanent identification methods including microchipping <i>Perform microchip implantation (GROUP)</i> | | |
| <i>Follow patient and personnel safety protocols</i> | | |
| Understand key nutritional factors in disease conditions and be familiar with therapeutic foods Develop and communicate hospital nutrition protocols | | |
| Demonstrate understanding of breeding/reproduction techniques | | |
| <i>Perform sanitation procedures for animal holding and housing areas</i> | | |
| <i>Maintain equipment used in animal care and nursing</i> | | |
| <i>Perform venipuncture for treatment or blood sampling</i> <ul style="list-style-type: none"> • <i>Cephalic (dog, cat)</i> • <i>Jugular (dog, cat, horse, ruminant)</i> | | |

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| <ul style="list-style-type: none"> • Saphenous (dog) • Coccygeal (cow) (NE) • Femoral (cat) (NE) | | |
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| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| <i>Administer parenteral medications</i> <ul style="list-style-type: none"> • Intravenous (dogs, cats, ruminants, horses) • Subcutaneous (dogs, cats, ruminants) • Intramuscular (dogs, cats, horses) (ruminants NE) • Intradermal (ruminants, dogs)(NE) | | |
| <i>Administer fluid therapy</i> <ul style="list-style-type: none"> • Administer subcutaneous fluids • Place intravenous catheters (cephalic – small animal, saphenous – dog, jugular NE) • Maintain catheters • Determine and maintain fluid infusion rate • Monitor patient hydration status • Develop familiarity with fluid delivery system | | |
| <i>Administer enteral medications</i> <ul style="list-style-type: none"> • Balling gun (ruminant) • Dose syringe (ruminant, horse) • Gastric intubation (small animal) (GROUP) • Hand pilling (dog, cat) • Oral speculum & stomach tube(ruminant) (NE) • Naso-gastric intubation (small animal, horse) (NE) | | |
| <i>Perform small animal dentistry</i> <ul style="list-style-type: none"> • Perform routine dental prophylaxis (manual and machine) | | |
| Husbandry | | |
| Understand therapeutic bathing, basic grooming, and dipping of small animals. | | |
| <i>Trim nails (dog, cat, exotics and birds)</i> | | |
| <i>Clean sheath (horse) (NE)</i> | | |
| Therapeutics | | |
| <i>Express canine anal sacs</i> | | |
| <i>Clean and medicate ears (dog, cat)</i> | | |
| <i>Administer intra mammary treatment (mastitis therapy only) (NE)</i> | | |

| <i>Administer enema (GROUP)</i> | | |
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| TASK | INCLUDED IN COURSE | INSTRUCTOR |
| <i>Apply topical medication to eye</i> | | |
| <i>Perform ocular diagnostic tests</i> <ul style="list-style-type: none"> • <i>Perform fluorescein staining and Schirmer tear test</i> • <i>Perform ocular tonometry</i> | | |
| <i>Apply equine leg & tail wraps</i> | | |
| <i>Apply and remove bandages, splints and sutures</i> | | |
| <i>Remove casts (NE)</i> | | |
| Explain physical therapy (hydrotherapy, Post-operative, orthopaedic, neurological) (NE) | | |
| Explain care of recumbent patient | | |
| Maintain chest, tracheotomy and pharyngostomy tubes (NE) | | |
| Apply established emergency protocols and maintain emergency medical supplies <ul style="list-style-type: none"> • <i>Perform first aid and cardiopulmonary resuscitation (simulation acceptable)</i> • <i>Use resuscitation bag</i> • <i>Apply emergency splints and bandages</i> | | |
| <i>Collect and cross-match blood (GROUP)</i> | | |
| <i>Perform blood typing and blood transfusions (NE)</i> | | |
| Explain principles of orphan animal care (NE) | | |
| Demonstrate understanding of nursing care of newborns | | |
| Demonstrate understanding of wound management and abscess care | | |
| Sample collection | | |
| <i>Collect urine sample</i> <ul style="list-style-type: none"> • <i>Catheterize male dogs (GROUP)</i> • <i>Collect voided urine sample</i> • <i>Palpate bladder (small animal)</i> • <i>Perform cystocentesis (small animal) (GROUP)</i> | | |
| <i>Collect and examine skin scrapings</i> | | |
| Prepare mare for vaginal examination & cervical culture (NE) | | |
| LABORATORY ANIMAL PROCEDURES | | |
| Explain basic principles of animal research protocols | | |

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| Rodents and Rabbits (Rodents include rats, mice, guinea pigs, hamsters, and gerbils. Essential skills must be performed using one or more of these species). | | |
| Recognize common species/breeds of rodents and rabbits | | |
| <i>Restrain and determine sex of common species/breeds of rodents and rabbits</i> | | |
| <i>Perform basic care procedures, e.g. feeding, watering, breeding, identification and handling</i> | | |
| <i>Administer drugs or medicaments, using appropriate sites and routes</i> | | |
| <i>Collect blood samples (GROUP)</i> | | |

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| <i>Perform oral dosing (GROUP)</i> | | |
| Know anaesthetic and recovery procedures | | |
| Explain common disease signs | | |
| <i>Clean & medicate ear (rabbit) (NE)</i> | | |
| Avian and Exotic Procedures (Includes birds, reptiles amphibians and ferrets) | | |
| <i>Recognize and restrain common species of birds</i> | | |
| <i>Recognize and restrain reptiles, amphibians and ferrets (NE)</i> | | |
| Demonstrate understanding of basic avian and exotic animal care procedures (e.g., feeding, watering, basic grooming (beak, wing, nail trimming) breeding, identification, caging & aquarium care) | | |
| <i>Perform a physical examination (bird)</i> | | |
| <i>Perform a physical examination (reptiles, amphibians and ferrets)(NE)</i> | | |
| Administer or inject drugs using appropriate sites & routes for each species (NE) | | |
| <i>Collect appropriate body tissues or fluids from live animals and perform laboratory procedures (NE)</i> | | |
| <i>Anaesthetize avian and exotic animals (NE)</i> | | |
| RADIOLOGY AND DIAGNOSTIC IMAGING | | |
| <i>Implement & follow recommended radiation safety Measures</i> | | |
| <i>Implement radiographic quality control measures</i> | | |

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| <i>Prepare and use radiographic technique charts (GROUP)</i> | | |
| <i>Take diagnostic radiographs using stationary and portable radiographic equipment (film or digital)</i> <ul style="list-style-type: none"> • <i>Position and take radiographic images of horses, dogs and cats</i> • <i>Position and take radiographic images of birds (NE)</i> • <i>Perform radiographic techniques utilized in assessing canine hip dysplasia (GROUP)</i> • <i>Demonstrate an understanding of the modifications of diagnostic imaging techniques as they apply to birds, rodents, rabbits and exotics</i> | | |
| <i>Create diagnostic dental radiographic images</i> | | |
| <i>Perform various contrast media studies (perform one of: GI series, pneumocystogram, intravenous urogram or other) (GROUP)</i> | | |
| <i>Process diagnostic radiographs</i> <ul style="list-style-type: none"> • <i>Automatic processing of exposed film (hand and digital are NE)</i> • <i>Label, file & store film</i> • <i>Complete radiographic logs, reports, files and records.</i> | | |

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| Demonstrate proper maintenance of radiographic equipment <ul style="list-style-type: none"> • Recognize faulty equipment operation | | |
| <i>Use and care of ultrasound equipment (NE)</i> | | |
| <i>Use and care of endoscopic equipment (NE)</i> | | |
| LABORATORY PROCEDURES | | |
| <i>Prepare laboratory samples for shipment</i> | | |
| <i>Prepare laboratory samples for diagnostic analysis</i> | | |
| <i>Maintain laboratory equipment</i> | | |
| <i>Perform quality control procedures</i> | | |
| Explain basic principles of laboratory safety | | |
| Urinalysis | | |
| <i>Perform urinalysis:</i> <ul style="list-style-type: none"> • <i>Determine physical properties (eg. color, clarity, specific gravity)</i> | | |

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| <ul style="list-style-type: none"> • <i>Test chemical properties</i> • <i>Examine and identify sediment</i> | | |
| TASK | INCLUDED IN COURSE | INSTRUCTOR |
| Hematologic Evaluations | | |
| Collect samples | | |
| <i>Perform CBC:</i> <ul style="list-style-type: none"> • <i>Haemoglobin</i> • <i>Hematocrit</i> • <i>Total protein (refractometer)</i> • <i>White cell count</i> • <i>Red cell count</i> | | |
| <i>Microscopic examination of blood films:</i> <ol style="list-style-type: none"> 1. <i>prepare blood film and stain</i> 2. <i>perform leukocyte differential: normal vs. abnormal</i> 3. <i>perform erythrocyte morphologic evaluation, normal vs. abnormal</i> 4. <i>estimate platelet count</i> 5. <i>calculate absolute values</i> 6. <i>perform white blood cell correction for nucleated red cells</i> | | |
| <i>Perform reticulocyte count</i> | | |

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| TASK | INCLUDED IN COURSE | INSTRUCTOR |
| <i>Calculate haematologic indices</i> | | |
| <i>Coagulation tests – perform one of the following (GROUP):</i> <i>Buccal mucosal bleeding time, activated clotting time (ACT), prothrombin time (PT), partial thromboplastin time (PTT), fibrinogen assay</i> | | |
| Identify blood parasites: <ul style="list-style-type: none"> • <i>Dirofilaria sp/Acanthocheilonema (formerly Dipetalonema sp) – direct, antigen kit (Knots, filter – both NE)</i> • <i>Hemotropic Mycoplasma sp (Hemoplasmas)(formerly Haemobartonella sp and Eperythrozoon sp)</i> | | |
| <i>Perform blood chemistry tests (BUN, glucose, common enzymes)</i> | | |
| <i>Collect and prepare serum samples and perform serologic tests (ELIZA, slide/card agglutinations)</i> | | |

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| Perform Parasitologic Procedures | | |
| <i>Collect samples</i> | | |
| Test for external parasites 1. Prepare sample 2. Identify: <ul style="list-style-type: none"> - Fleas - Flies - Lice - Mites - Ticks | | |
| <i>Test for internal parasites</i> 1. Prepare floatation solutions (NE) 2. Perform faecal flotations 3. Perform faecal sedimentation 4. Perform direct smears 5. Scotch tape retrieval of pinworm ova (NE) 6. Baermann tests | | |
| Identify common parasitic forms, their ova and apply knowledge of common parasite life cycles <ul style="list-style-type: none"> - Nematodes - Trematodes - Cestodes - Protozoa | | |
| Perform coprologic tests (NE) | | |
| Perform Microbiologic Procedures | | |
| <i>Collect representative samples</i> | | |
| <i>Culture bacteria & perform sensitivity tests</i> | | |
| <i>Identify common animal pathogens using commercially available media and reagents (GROUP).</i> | | |
| <i>Perform common biochemical tests (GROUP)</i> | | |
| <i>Perform staining procedures</i> | | |
| <i>Conduct mastitis testing (CMT, bacterial culture) (GROUP)</i> | | |
| <i>Culture and identify common dermatophytes</i> | | |

| TASK | INCLUDED IN COURSE | INSTRUCTOR |
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| Perform Cytologic Procedures | | |
| <i>Collect, prepare and evaluate ear cytology</i> | | |
| <i>Collect, prepare and evaluate canine vaginal smears (GROUP)</i> | | |

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| <i>Assist in collecting, preparing and appropriately evaluating transudate, exudates & cytologic specimens (joint, cerebrospinal, airway and body cavity) (NE)</i> | | |
| <i>Perform fine needle tissue aspirates and impression smears (NE)</i> | | |
| <i>Prepare and stain bone marrow specimens (differentiate between benign and malignant) (NE)</i> | | |
| <i>Perform semen evaluation (NE)</i> | | |
| <i>Explain timing and types of pregnancy testing (NE)</i> | | |
| <i>Assist with artificial insemination (NE)</i> | | |
| Necropsy Procedures | | |
| <i>Perform a postmortem examination or dissection on non-preserved animal (GROUP)</i> | | |
| <i>Collect samples, store and ship according to laboratory protocols (GROUP)</i> | | |
| <i>Explain how to handle rabies suspects & samples safely</i> | | |
| <i>Handle disposal of dead animals (NE)</i> | | |
| <i>Perform euthanasia procedures (NE)</i> | | |