Clinical Competencies Checklist

Class of 2021
# Advisor Sign off

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<td>End of 1\textsuperscript{st} year</td>
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<td>End of 3\textsuperscript{rd} year</td>
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<td>Tasks Completed</td>
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When all tasks are completed, please hand this book into the Office of the Associate Dean for Academic Affairs
AVMA Statement on Clinical Competencies Outcomes:

Veterinary graduates must have the basic scientific knowledge, skills and values to practice veterinary medicine, independently, at the time of graduation. At a minimum, graduates must be competent in providing entry-level health care for a variety of animal species.

The school/college must develop relevant measures and provide evidence that graduating students have attained the following competencies:

1. comprehensive patient diagnosis (problem solving skills), appropriate use of clinical laboratory testing, and record management
2. comprehensive treatment planning including patient referral when indicated
3. anesthesia and pain management, patient welfare
4. basic surgery skills, experience, and case management
5. basic medicine skills, experience and case management
6. emergency and intensive care case management
7. health promotion, disease prevention/biosecurity, zoonosis, and food safety
8. client communications and ethical conduct
9. critical analysis of new information and research findings relevant to veterinary medicine.

GENERAL GUIDELINES

Skills must be signed off by an NCSU faculty or staff member unless a practice training program has been approved or the skill is starred. Approved practice training programs are listed on the Clinical Competencies website. Starred skills may be signed off during any extramural practice experience.
ESSENTIAL MATERIAL:

EVERY VETERINARY STUDENT MUST GET SIGNED OFF ON THE FOLLOWING

• Act as primary surgeon for at least 1 feline castration, 1 feline spay, 1 canine castration, 1 canine spay and 6 other procedures. The feline castration, feline spay, canine castration, and canine spay must be signed off by an NCSU faculty member. The remaining 6 surgeries* can be signed off by any supervising veterinarian. Feline castrations do not count towards the 6 surgeries. (LIST SURGERY PROCEDURE AND THE DATE AT TIME OF SIGN OFF).

• Attend one approved diversity training experience (i.e. Cultural Awareness Seminar) each of the first three years of veterinary college and write a paragraph reflecting on what you learned from the experience; turn in to your advisor

• Completed required sections of the Emerging and Exotic Diseases of Animals (EEDA) and USDA Initial Accreditation Training (IAT) online learning modules and obtain IAT certificate

• Each DVM student is required to have one research-related educational experience before graduation, including those students with a graduate degree. Such experiences could include, but are not limited to:
  1. Being in the Clinician Scientist Focus Area, with completion of its research requirements.
  2. Performing a summer of approved research at NCSU or another institution. (Previous research work will not qualify.)
  4. Successful completion of a research-related selective (i.e. Intro to Research at the CVM, Molecular Medicine Initiative selectives, research selectives personally arranged or already existing such as Advanced Pathology)
  5. Attending a research-related conference and supplying a three-page report to your advisor on the experience.
  6. Attending the annual CVM Research Forum and supplying a three-page report to your advisor on the experience.
  7. Attending a research seminar at the CVM, elsewhere at NCSU or at another institution and writing a three-page
report on the seminar and one related publication. (Attending
clinical conference is not included.) Hand in the report to
your advisor.

8. Writing and submitting a research proposal to an extramural
funding agency.

9. Research experiences in Special Topics courses (i.e. Swine
Medicine).

10. Being an author on a research paper (not a case report) while
in veterinary college

CORE MATERIAL;

90% OF THE FOLLOWING SKILLS MUST BE COMPLETED BEFORE
GRADUATION

Husbandry/Restraint/Routine Client Education skills

• Demonstrate the ability to identify the major categories for
common domestic species. Includes being able to identify yearling
heifer, steer calf, brood cow, etc. Identify common coat colors in
the horse, mare, gelding, stallion, foal, yearling.

• Demonstrate the ability to safely catch and restrain a horse, a
cow, a pig and a sheep. Includes haltering, leading, twitching,
restraining for venipuncture, and picking up feet.

• Demonstrate a quick release knot and a quick-release halter tie or a
quick release tail tie.

• Demonstrate the ability to safely catch and restrain a dog, a cat, a
bird species, a reptile species, one small mammal other than a dog
or cat.

• Be able to load and operate a projectile drug delivery device (blow
gun, air rifle, pole syringe)

• Demonstrate the ability to observe an animal and state whether
behaviors observed are normal/abnormal: one large animal species,
one small animal species, one species of your choice

• Demonstrate the ability to identify and evaluate basic large animal
foods types: at least 3 types of hay, 2 types of grain, 2 major pig feeds

• Demonstrate ability to counsel a potential owner on pet/animal
selection criteria (eg:spp/breed vs. owner lifestyle)* for 2 species
seen in practice
• Demonstrate ability to educate owner regarding the biological needs (housing, routine care, general feeding guidelines) of 2 species commonly seen in practice*
• Demonstrate ability to educate owner regarding the socialization, behavioral needs, and training (including housetraining, if appropriate) of 2 species commonly seen in practice*
• Demonstrate ability to educate owner regarding routine reproduction of 2 species commonly seen in practice*
• Demonstrate ability to counsel owner on core vaccination requirements for 2 species commonly seen in practice*
• Demonstrate ability to counsel owner on parasite control regimes for 2 species commonly seen in practice*
• Demonstrate the ability to counsel potential owner on selection of, biological requirements of, and proper husbandry techniques for a zoological species commonly seen in practice.*
• Demonstrate nutritional assessment for any species
• Develop a complete wellness lifestage feeding plan for any species

Physical exam skills
• Perform basic physical exam dog, cat, horse, cow or small ruminant, pig, one reptile species, one bird species, one small mammal other than dog or cat, one other species of your choice. Includes TPR, demonstrating the ability to localize and describe sounds in the thorax, localize and demonstrate organs within the abdomen, demonstrate abdominal palpation and auscultation. Must know normal TPR for a small mammal, dog, cat, horse, and cow. Must be able to name and identify major lymph nodes in appropriate species. Must be able to perform rectal exam and express anal sacs in dog.
• Body condition scoring in dog, cat, horse, cow
• Perform the following specialty exams :

Orthopedic (lameness) exam on a small animal patient and a horse, including naming and identification of all major joints, recognizing normal angles and range of motion for major joints and the hoof, use of a goniometer, use of a hoof tester , use of a hoof pick, use of a hoof gauge, flexion tests, thigh circumference measurement in dog
Neurologic exam small animal patient, horse, must demonstrate:
• Patellar reflex
• Withdrawal reflex
• Panniculus reflex
• Deep pain assessment
• Menace response
• Palpebral reflex
• Pupillary light reflex
• Conscious proprioception
• Hopping
• Bladder palpation/expression

Ophthalmic exam, including use of direct and indirect ophthalmoscope, ocular pressure measurement, small animal patient, horse. Must demonstrate:
• Menace response
• Pupillary light reflex
• Dazzle reflex
• Schirmer tear test
• Fluoroscein staining

Dermatologic exam, as appropriate for patient, Must demonstrate:
• General dermatologic exam
• Recognize primary and secondary dermatological lesions
• Otic examination
• Skin scrapings - deep / superficial
• Skin cytology - tape/swab/aspiration
• Otic cytology
• Appropriate methods of collection of samples for bacterial / fungal culture
• Woods lamp examination
• Trichogram

Cardiovascular exam, including identifying, describing, and assessing the clinical significance of transient heart sounds and murmurs, examining arterial and venous pulses, obtaining a resting standard 6-lead EKG, accurately measuring noninvasive arterial blood pressure in small and large animal patients
Oncologic exam, including identification of peripheral lymph nodes in the dog or cat and performance of fine needle aspiration of a lymph node or mass

Reproductive exam
• Obtain and interpret a vaginal smear in the bitch.
• Conduct a pregnancy exam on a bovine, equine, and canine female.
• Prepare and evaluate semen from either a stallion, bull, or a stud dog.
• Conduct an examination of the external genitalia of the intact bovine, canine, and equine male and female.
• Properly describe and correct malpresentations, positions, and postures in a case of bovine or equine dystocia. They should also be able to place obstetrical chains properly on either the fore or rear limbs of a bovine or equine fetus.

Sample taking
• Obtain a blood sample dog, cat, horse, cow, small ruminant, pig, one bird species, one reptile/amphibian species, one small mammal other than dog or cat, one other species of your choice.
• Collect blood using needle and syringe
• Collect blood using vacutainer.
• Obtain a urine sample using catheterization
• Obtain a urine sample using cystocentesis
• Obtain a milk sample from a cow for mastitis evaluation
• Obtain a fecal sample
• Obtain a cloacal culture (bird)

Radiology, Necropsy, Clinical Pathology, Parasitology
• Perform radiographic exams for 5 patients (position, create, process, interpretradiographs)
• Perform complete necropsy on two mammalian species, one species of choice.
• Collect samples appropriate for 1) biopsy submission from three tissue types, 2) microbiological or toxicologic sampling.
• Be able to select a pig from a group for post-mortem examination. In the pig, be able to identify major lymph nodes, tonsils, area of lung most affected by pneumonia, sites of ulcers.
• Process a blood sample (PCV, TS, glucose, BUN, prepare and stain a blood smear, do a blood smear differential, estimate platelet count)
• Process a urine sample (reagent strip, specific gravity, sediment exam)
• Examine a fecal sample for parasites using appropriate techniques (centrifugation, direct smear, McMaster’s technique)
• Microfilaria ID in blood drop
• Microscope technique specific to parasitology specimens
• Perform an ELISA test
• Demonstrate the Gram stain technique

**Basic medicine skills**, experience, problem solving and case management

• Obtain a complete clinical history for 5 patients. Obtain client histories with clinician supervision, demonstrating appropriate body language, eye contact, appropriate language, respect for client’s emotions and view of the problem.
• Define “chief complaint” and create a prioritized problem list for 6 patients, including one special species patient.
• Based on the patient’s problem list, make a differential diagnosis list for 5 patients, including one special species patient.
• Based on the patient’s differential diagnosis list, choose the appropriate diagnostic tests for 5 patients.
• Create a problem-oriented medical record for 5 patients, demonstrating ability to organize and succinctly state facts and opinions with correct spelling and punctuation.
• Provide oral summary of 5 cases for peers, demonstrating organization and precise language
• Create laboratory flow sheet for 2 individual animals, demonstrate case management using flow sheet
• Follow 5 patients through treatment of a problem
• Discuss case progress with 5 clients, demonstrating ability to address client concerns, to discuss financial matters, empathy with client, appropriate boundaries with client
• Provide oral discharge instructions for 5 clients, demonstrating solicitation of client feedback to assure that the instructions are understood, solicitation of client’s point of view and concerns
regarding ability to provide treatment, appropriate demonstration of techniques

- Write 5 discharge instructions, demonstrating ability to organize and succinctly state facts and opinions with correct spelling and punctuation
- Perform follow up phone calls on 5 patients to assure problem resolution or need for continuing diagnostics/therapy
- Participate in medical primary care clinic at least 5 days (wellness clinic, shelter, vaccination clinic, practice)
- Participate in the management of at least 5 medical referral patients (any species)
- Evaluate, workup and properly record a case involving a population of animals.
- Demonstrate oral administration of medications horse, ruminant, dog, cat, one bird species, one reptile species, one small mammal other than dog or cat, one other species of your choice. Includes demonstrating tablet administration, or the use of an oral dose syringe, as appropriate.
- Demonstrate SC administration of medication large animal, small animal, one bird species, one reptile species, one small mammal other than dog or cat, one other species of your choice
- Demonstrate IM administration of medication large animal, small animal, one bird species, one amphibian/reptile species, one small mammal species, one other species of your choice. Includes being able to show landmarks for muscle groups, knowing muscles used in food animals, knowing pros and cons of each injection site. Specifically be able to discuss sites used for vaccines, large volumes (procaine penicillin in the horse), iron shots in pigs.
- Demonstrate bolus IV administration of medication large animal, small animal, other species of choice.
- Choose, calculate amounts and administer intravenous fluids to 7 animals.
- Choose and calculate correct drug dosages for 8 animals, including one patient receiving constant rate infusion drugs and one bird species, one amphibian/reptile species, one small mammal other than dog or cat.
• Write 5 outpatient prescriptions in a format that would allow them to be filled at a compounding or human pharmacy
• Administer 5 controlled drugs, keeping correct records for each drug.
• Demonstrate ability to evaluate and suggest treatment for a common behavioral problem, such as feline house soiling.
• Articulate the rationale for recommending a given diet for a given disease state

**Anesthesia and pain management, patient welfare**
• Identify parts of an anesthesia machine
• Put together a circle system
• Put together a non-rebreathing system
• Place IV catheter in 3 small animals (dog, cat, small mammal)
• Intubate 6 small animals, including at least 2 cats. Intubate or assist intubation of one bird species, one reptile species.
• Place blood pressure monitors on 3 patients
• Perform anesthesia on 5 small animals, including record keeping and demonstrating knowledge of monitoring equipment, anesthesia/analgesia
• Perform anesthesia or sedation on a small mammal.
• Perform anesthesia on 1 large animal, including record keeping and demonstrating knowledge of monitoring equipment, anesthesia/analgesia
• Calculate and administer constant rate IV drug infusion.
• Design pain management/anesthesia regime for 3 small animal surgical patients
• Design pain management/anesthesia regime for 1 large animal surgical patient
• Design pain management/anesthesia regime for 1 special species patient
• Design chronic pain management treatment (any species)
• Perform pain scoring on 5 patients (any species)
• Perform 3 local analgesic blocks on any species. Be able to demonstrate the landmarks for commonly used local blocks (dehorning, standing procedures in ruminants, declaw surgery in cats, etc)
• Perform 1 epidural on any species
• Participate in one euthanasia (any species) and explain indications and methods of euthanasia, including methods appropriate for zoological species commonly seen in practice
• Educate one lay person on an animal welfare issue

**Dentistry**
• Dental exam on small animal patient, including charting of lesions
• Dental exam on a large animal patient, demonstrating the ability to age a horse and a cow by its teeth. Know eruption times used for aging immature animals.
• Demonstrate canine or feline dental cleaning and extraction

**Basic surgery skills, experience, and case management**
• Demonstrate knot tying (square knot, friction knot, one hand tie, two hand tie, instrument tie)
• Demonstrate correct instrument handling (three point grip, pencil grip, suture cutting)
• Demonstrate basic suturing techniques (simple interrupted, simple continuous, Cushing, Lembert, Ford interlocking, horizontal mattress, vertical mattress)
• Demonstrate pack preparation
• Demonstrate patient preparation
• Demonstrate sterile technique (scrubbing/rubbing, gowning, gloving, draping, ability to keep a sterile field)
• Demonstrate wound closure
• Demonstrate drain placement
• Demonstrate bandaging techniques, small animal
• Demonstrate emergency bandaging techniques, large animal
• Demonstrate bandaging of an open wound (wet-dry bandage).
• Demonstrate suture or staple removal
• Participate in the management of at least 5 surgical referral patients (any species)
• See Essential Skills for required surgeries.

**Emergency and intensive care case management**
• Demonstrate thoracocentesis in small animal patient
• Demonstrate abdominocentesis
• Demonstrate tracheostomy
• Demonstrate administration of nasal oxygen
• Demonstrate technique for gaining emergency venous access
• Demonstrate CPR
• Outline steps for resuscitation of either a large or small animal in hypovolemic or septic shock including: goals of therapy, fluid therapy (choice of fluid, rate and amount, IV catheter choice), drug therapy and monitoring response of therapy.

Health promotion, disease prevention, zoonosis and food safety
• Health promotion/disease prevention - see restraint/husbandry/routine education/TAU sections
• Demonstrate ability to educate lay person(s) on 5 zoonotic diseases including at least one that involves zoological species*
• Demonstrate ability to educate lay person(s) on 5 diseases transmitted by food, the role of the veterinarian in preventing transmission, and the precautions the lay person should take*
• Design a population based disease control or prevention plan.
• Demonstrate proficiency in planning and execution of a simulated or real outbreak investigation.
• Be able to articulate and provide examples of how veterinarians in public practice promote and protect public and animal health.
• Evaluate a facility housing large numbers of animals (shelter, farm, zoo, lab animal) for environmentally responsible practices including waste disposal, human/production animal/wildlife interactions, energy conservation, and emissions/discharge management. *
• Fill out and complete a Coggins test form
• Complete a health certificate

Client communications and ethical conduct
• Discuss one ethical dilemma facing an individual veterinarian or the profession, demonstrate ability to choose a position based on system of values
• Demonstrate the ability to educate a colleague or a lay person(s) on an ethical or welfare issue
• Written Communication: See Medicine skills
• Oral Communication: See Medicine skills, Animal Welfare
• Client sensitivity/Grief counseling: Participate in counseling of a client that has lost an animal or explain stages of grief and techniques for helping client deal with loss*
• Teamwork: Be a member of 5 teams and receive passing grades for team participation skills
• Conflict resolution: Discuss one legal/conflict issue, demonstrating knowledge of the legal issue, both points of view in conflict, suggest possible resolution
• Diversity Training: see Essential Skills

Strong appreciation for the role of research in furthering the practice of veterinary medicine. See Essential Skills.
The following skills will be checked off in Health Maintenance and Animal Production I, II, III
Teaching Animal Unit

Must Learn Skills

**Equine:**
- Approach, catch and halter a horse
- Lead and turn a horse at the walk
- Lead a horse at the trot
- Pick up and hold a forelimb and hind limb of a horse
- Groom a horse
- Use hoof testers
- Tie a quick release knot
- Use a weight tape
- Perform physical exam on adult horse
- Perform physical exam on neonatal foal
- Perform ocular exam
- Place nose twitch
- Perform skin fold twitch
- Perform ear twitch
- Place chain shank over nose
- Place chain shank over lip
- Complete written physical exam form
- Collect blood into a vacutainer
- Collect blood using a needle and syringe
- Administer an oral medication
- Administer an intramuscular injection
- Administer an intravenous injection
- Administer a subcutaneous injection
- Fill out and complete a Coggins test form
Complete a health certificate
Demonstrate the use of the hook pick and the hoof gauge
Perform lameness exam (including all flexion tests)
Perform neurological exam (including cranial nerve and movement exam)
Pass nasogastric tube
Classify horse types: mare, gelding, stallion, foal.

Cattle:

Herding animals
Correctly halter a cow
Tie a quick release knot
Cast a cow with a rope
Perform a Physical exam
Correctly classify types of cattle (heifer, steer, calf, brood cow, etc)
Identify methods of identification of animals
Body condition scoring and relation to life cycle
Collect blood sample from jugular
Collect blood sample from the tail vein
Perform and interpret a TB test
Injection site identification (Beef Quality Assurance)
Identify and perform an intramuscular injection
Identify and perform an intravenous injection
Identify and perform subcutaneous injection
Identify needle sizes for IM, SQ, and IV injections
Administer an oral bolus to at least 2 cows
Pass a stomach tube and administer oral fluids
Processing calves:
Know how to perform all procedures
Actively perform at least two procedures (tattooing, castration, disbudding, implanting)
Pregnancy check > 5 months
Collect a sterile milk sample
Perform a CMT test
Interpret a CMT test
Properly use a hoof knife
Restrain and lift a foot for trimming or lameness evaluation

**Sheep/Goats:**
Know and use FAMACHA system for parasite control
Blood collection from jugular vein
Identify jugular landmarks, lung fields, rumen location
Determine age of goats or sheep
Perform vaccinations
Perform intramuscular injection (identify sites)
Perform subcutaneous injection (identify sites)
Perform a foot trim
Body condition score a goat or sheep
Disbudding procedures and nerve blocks (goat only)
Perform an ultrasound pregnancy diagnosis
Interpret an ultrasound pregnancy diagnosis
Interpret an ultrasound finding
Perform a physical exam on two different small ruminants
Restrain a sheep or goat
Demonstrate methods for identification of small ruminants
Administer an oral medication to a sheep or goat
Demonstrate two processing procedures used in lambs or kids
Swine:
Safely restrain suckling, nursery, and finisher pigs
Safely move nursery or finisher pigs between pens or sort within pen
Identify which TAU pig housing facilities are for what age groups
Interpret average/expected litter size data
Be able to list pros and cons of breeding herd housing systems
Identify the major feed ingredients in pig rations
Describe and recognize normal feeding behavior
Perform pregnancy diagnosis in female pigs using different methods
Identify signs of estrus in the female pig
Complete physical examinations on individuals and groups of pigs
Restrain and collect blood from nursery and/or finishing age pigs
List the key criteria for selection of optimal pigs for diagnostic testing
Identify these key diagnostically significant anatomic structures:
Tonsils, turbinates, region of stomach prone to ulcers, ileum, spiral colon, lung lobes, lymph nodes

Poultry:
Catch and safely restrain a chicken or a turkey
Perform a basic physical examination on a chicken or a turkey
Evaluate general health status of a chicken or a turkey flock
Restrain a chicken or a turkey for the purpose of collecting a brachial vein sample
Collect a brachial vein blood sample from a chicken or a turkey with assisted restraint (2 people)
Collect a brachial vein sample from a chicken or a turkey while restraining the bird (1 person)
Make a blood smear for cytology, using blood collected from a chicken or a turkey
Restrain a chicken or a turkey for the purposes of collecting choanal and oropharyngeal swabs
Perform choanal and oropharyngeal swabs on a chicken or a turkey
Perform a cloacal swab on a chicken or a turkey
Perform a tracheal swab on chicken or a turkey
Perform a necropsy on a chicken or a turkey
Perform a subcutaneous injection on a chicken or a turkey
Perform an intramuscular injection on a chicken or a turkey

FOCUS AREA MATERIAL:

EACH FOCUS AREA WILL DETERMINE REQUIRED TASKS FOR STUDENTS IN THE FOCUS AREA
TAU: Cow

A: Cast cow with rope

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

B: Place halter

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

C: Quick release knot

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

D: Collect blood, tail vein

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production
TAU: Cow

E: Classify: heifer, steer calf, brood cow etc

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

F: Herd animals

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

G: Identify Animal ID methods

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

H: Body condition score, relate to life cycle

Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Cow

I: Complete Physical exam
Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

J: Administer oral bolus,, at least 2 cows
Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

K: Collect blood, jugular
Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

L: IV injection, ID needle sizes
Sign-offs:
Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
**TAU: Cow**

**M:** Pass stomach tube, give oral fluids

*Sign-offs:*

*Cow*  

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production

**N:** Perform and interpret TB test

*Sign-offs:*

*Cow*  

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production

**O:** IM injection, ID needle sizes

*Sign-offs:*

*Cow*  

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production

**P:** Injection site ID, (Beef Quality Assurance)

*Sign-offs:*

*Cow*  

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production
TAU: Cow

Q: SC injection, ID needle sizes

Sign-offs:

Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

R: Collect sterile milk sample

Sign-offs:

Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

S: Perform CMT test

Sign-offs:

Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

T: Interpret CMT test

Sign-offs:

Cow

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Cow

U: Demo 2 procedures to process calves

**Sign-offs:**

Cow

**Offered in Courses...:**

VMP 916/936/956  Health Maintenance and Animal Production

V: Use hoof knife properly

**Sign-offs:**

Cow

**Offered in Courses...:**

VMP 916/936/956  Health Maintenance and Animal Production

W: Restrain and lift foot for trim or lameness exam

**Sign-offs:**

Cow

**Offered in Courses...:**

VMP 916/936/956  Health Maintenance and Animal Production

X: Pregnancy check > 5 months

**Sign-offs:**

Cow

**Offered in Courses...:**

VMP 916/936/956  Health Maintenance and Animal Production
TAU: Horse

A: Approach, catch, halter
Sign-offs:
   Horse

Offered in Courses...
VMP 916/936/956  Health Maintenance and Animal Production

B: Lead and turn at walk
Sign-offs:
   Horse

Offered in Courses...
VMP 916/936/956  Health Maintenance and Animal Production

C: Lead at trot
Sign-offs:
   Horse

Offered in Courses...
VMP 916/936/956  Health Maintenance and Animal Production

D: Groom
Sign-offs:
   Horse

Offered in Courses....
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Horse

E: Use weight tape
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

F: Tie quick release knot
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

G: Pick up and hold forelimb, hindlimb
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

H: Use hoof testers
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
I: Chain shank, lip

*Sign-offs:*

Horse

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production

J: Chain shank, nose

*Sign-offs:*

Horse

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production

K: Skin Fold Twitch

*Sign-offs:*

Horse

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production

L: Ear Twitch

*Sign-offs:*

Horse

*Offered in Courses...:*

VMP 916/936/956  Health Maintenance and Animal Production
TAU: Horse

M: Nose Twitch

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

N: Ocular exam (include PLR, menace, dazzle)

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

O: Complete physical exam, adult

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

P: Complete physical exam, foal

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Horse

Q: Complete written PE form

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

R: Classify: mare, gelding, stallion, foal, yearling

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

T: Collect blood into vacutainer

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

U: Collect blood using needle and syringe

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production
VMP 916/936/956
Health Maintenance and Animal Production

TAU: Horse

V: Administer SC injection
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

W: Administer IM injection
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

X: Administer IV injection
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

Y: Demo oral administration medicine
Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production
TAU: Horse

Z: Fill out Coggins form

*Sign-offs:
Horse

*Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

ZA: Health certificate

*Sign-offs:
Horse

*Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

ZB: Demo use hoof pick, hoof gauge, flexion tests

*Sign-offs:
Horse

*Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

ZC: Lameness exam, include flexion tests

*Sign-offs:
Horse

*Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Horse

ZD: Neuro exam, include cranial nerve, movement

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

ZE: Pass nasogastric tube

Sign-offs:
Horse

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
1: Catch and restrain

Sign-offs:

Poultry

Offered in Courses:

VMP 916/936/956 Health Maintenance and Animal Production

2: Basic physical exam

Sign-offs:

Poultry

Offered in Courses:

VMP 916/936/956 Health Maintenance and Animal Production

3: Evaluate general health of flock

Sign-offs:

Poultry

Offered in Courses:

VMP 916/936/956 Health Maintenance and Animal Production

4: Restrain for purposes of blood sample

Sign-offs:

Poultry

Offered in Courses:

VMP 916/936/956 Health Maintenance and Animal Production
TAU: Poultry

5: Collect blood sample with assisted restraint

Sign-offs:
   Poultry

Offered in Courses...:
   VMP 916/936/956  Health Maintenance and Animal Production

6: Restrain for choanal/oropharyngeal swabs

Sign-offs:
   Poultry

Offered in Courses...:
   VMP 916/936/956  Health Maintenance and Animal Production

7: Perform choanal/oropharyngeal swabs

Sign-offs:
   Poultry

Offered in Courses...:
   VMP 916/936/956  Health Maintenance and Animal Production

8: Perform cloacal swab

Sign-offs:
   Poultry

Offered in Courses...:
   VMP 916/936/956  Health Maintenance and Animal Production
TAU: Poultry

9: Collect blood sample while restraining bird

Sign-offs:

Poultry

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production
TAU: Small Ruminant

A: Restrain sheep or goat

Sign-offs:
Small Ruminant

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production

B: Physical exam (TWO)

Sign-offs:
Small Ruminant

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production

C: ID landmarks: jugular, lung, rumen

Sign-offs:
Small Ruminant

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production

D: Determine age

Sign-offs:
Small Ruminant

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production
E: Blood collection, jugular

**Sign-offs:**
- Small Ruminant

**Offered in Courses...:**
- VMP 916/936/956  Health Maintenance and Animal Production

F: Use FAMACHA system for parasite control

**Sign-offs:**
- Small Ruminant

**Offered in Courses...:**
- VMP 916/936/956  Health Maintenance and Animal Production

G: Nerve block and disbudding goat

**Sign-offs:**
- Small Ruminant

**Offered in Courses...:**
- VMP 916/936/956  Health Maintenance and Animal Production

H: Demo 2 processing procedures lambs/kids

**Sign-offs:**
- Small Ruminant

**Offered in Courses...:**
- VMP 916/936/956  Health Maintenance and Animal Production
TAU: Small Ruminant

I: Body condition score

Sign-offs:
Small Ruminant

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

J: ID IM inject sites and inject

Sign-offs:
Small Ruminant

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

K: ID SC inject sites and inject

Sign-offs:
Small Ruminant

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production

L: Animal ID methods: small ruminants

Sign-offs:
Small Ruminant

Offered in Courses...:
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Small Ruminant

M: Administer oral medication

Sign-offs:
Small Ruminant

Offered in Courses....:
VMP 916/936/956  Health Maintenance and Animal Production

N: Vaccinate

Sign-offs:
Small Ruminant

Offered in Courses....:
VMP 916/936/956  Health Maintenance and Animal Production

O: Perform foot trim

Sign-offs:
Small Ruminant

Offered in Courses....:
VMP 916/936/956  Health Maintenance and Animal Production

P: Perform ultrasound pregnancy dx

Sign-offs:
Small Ruminant

Offered in Courses....:
VMP 916/936/956  Health Maintenance and Animal Production
Q: Interpret ultrasound finding

Sign-offs:
Small Ruminant

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production
TAU: Swine

A: Restrain suckling, nursery, finisher pigs

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

B: Move nursery/finisher pigs between pens or sort

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

C: ID which TAU pig unit houses which age pig

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

D: Explain average/expected litter size

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production
TAU: Swine

E: State pros/cons breeding herd housing systems

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

F: ID major ingredients, pig rations

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

G: Recognize normal/abnormal feeding behavior

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production

H: Perform pregnancy dx, use different methods

Sign-offs:
Swine

Offered in Courses...:
VMP 916/936/956 Health Maintenance and Animal Production
<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>TAU: Swine</td>
<td></td>
</tr>
<tr>
<td>I: ID signs of estrus, female pig</td>
<td></td>
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<tr>
<td>Sign-offs:</td>
<td>Swine</td>
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<tr>
<td>Offered in Courses...:</td>
<td>VMP 916/936/956 Health Maintenance and Animal Production</td>
</tr>
<tr>
<td>J: Physical exams: individual/group pigs</td>
<td></td>
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<tr>
<td>Sign-offs:</td>
<td>Swine</td>
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<tr>
<td>Offered in Courses...:</td>
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</tr>
<tr>
<td>K: Collect blood nursery and/or finisher pigs</td>
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<tr>
<td>Sign-offs:</td>
<td>Swine</td>
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<tr>
<td>Offered in Courses...:</td>
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<tr>
<td>L: List criteria: picking pigs for dx testing</td>
<td></td>
</tr>
<tr>
<td>Sign-offs:</td>
<td>Swine</td>
</tr>
<tr>
<td>Offered in Courses...:</td>
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</tr>
</tbody>
</table>

Clinical Competencies  25
TAU: Swine

M: ID tonsils, turbinates

Sign-offs:
Swine

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production

N: ID region of stomach prone to ulcers

Sign-offs:
Swine

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production

O: ID ileum, spiral colon, lung lobes, lymph nodes

Sign-offs:
Swine

Offered in Courses:
VMP 916/936/956  Health Maintenance and Animal Production
Demo IV medication administration

*Sign-offs:*
- Any species
- Small Animal

*Offered in Courses...:*
- VMC 937 Intro to Physical Examination Skills
- VMC 932 Principles of Surgery
- VMC 957 Intro to Clinical Practice
- Clinics Fourth Year clinics

Demo oral admin medicine (tablet, dose syringe)

*Sign-offs:*
- Any species
- Dog

*Offered in Courses...:*
- VMC 937 Intro to Physical Examination Skills
- VMC 932 Principles of Surgery
- Clinics Fourth Year clinics

Demo SC medication administration

*Sign-offs:*
- Any species
- Small Animal

*Offered in Courses...:*
- VMC 937 Intro to Physical Examination Skills
- VMC 932 Principles of Surgery
- Clinics Fourth Year clinics
Obtain catheterized urine sample

**Sign-offs:**

Any species

**Offered in Courses...:**

VMC 937  Intro to Physical Examination Skills
Physical Exam: A General Exam

Do body condition score Dog

Sign-offs:
Dog

Offered in Courses...:
VMC 937 Intro to Physical Examination Skills

General physical exam

Sign-offs:
Dog

Offered in Courses...:
VMC 937 Intro to Physical Examination Skills

TPR, perform and know normal

Sign-offs:
Dog

Offered in Courses...:
VMC 937 Intro to Physical Examination Skills
Physical exam: CV

ID heart sounds

Sign-offs:
Small Animal

Offered in Courses:
VMC 937 Intro to Physical Examination Skills

ID sites of obtain pulses

Sign-offs:
Small Animal

Offered in Courses:
VMC 937 Intro to Physical Examination Skills
Physical exam: Neuro

Bladder palpate/express

**Sign-offs:**
Small Animal

**Offered in Courses...:**
VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II

Deep pain, conscious proprio, hopping

**Sign-offs:**
Small Animal

**Offered in Courses...:**
VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II

Menace, PLR, palpebral reflex

**Sign-offs:**
Small Animal

**Offered in Courses...:**
VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II

Patellar, withdrawal, panniculus reflex

**Sign-offs:**
Small Animal

**Offered in Courses...:**
VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II
Physical exam: Onco

ID palpable peripheral lymph nodes

Sign-offs:
Small Animal

Offered in Courses...:
VMC 937 Intro to Physical Examination Skills
Physical exam: Ophtho

Fluorescein staining

*Sign-offs:*

Any species

*Offered in Courses...:*  
VMC 937 Intro to Physical Examination Skills

Ocular pressure measurement

*Sign-offs:*

Small Animal

*Offered in Courses...:*  
VMC 937 Intro to Physical Examination Skills

PLR, menace, dazzle reflex

*Sign-offs:*

Small Animal

*Offered in Courses...:*  
VMC 937 Intro to Physical Examination Skills

Schirmer tear test

*Sign-offs:*

Any species

*Offered in Courses...:*  
VMC 937 Intro to Physical Examination Skills
Physical exam: Ophtho

Use direct/indirect ophthalmoscope

Sign-offs:

Small Animal

Offered in Courses...:

VMC 937 Intro to Physical Examination Skills
Physical exam: Ortho

Measure limb circumference

**Sign-offs:**

Small Animal

**Offered in Courses...:**

VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II

Palpate and name major joints

**Sign-offs:**

Small Animal

**Offered in Courses...:**

VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II

Recognize normal/abnormal joint angle

**Sign-offs:**

Small Animal

**Offered in Courses...:**

VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II

Use goniometer

**Sign-offs:**

Small Animal

**Offered in Courses...:**

VMC 937  Intro to Physical Examination Skills
VMC 961  Companion Animal Medicine and Surgery II
Restraint/Husbandry

Safely catch and restrain

*Sign-offs:*

Dog

*Offered in Courses...:

VMC 937 Intro to Physical Examination Skills
Clinical Pathology

Demonstrate Gram Stain Technique

Sign-offs:
N/A

Offered in Courses:
VMP 910 Infection and Immunity I
VMC 927
Intro to Companion Animal Behavior

Medicine: Case Management

1. Evaluate and suggest rx common behavior problem

Sign-offs:
Any species

Offered in Courses...
VMC 927 Intro to Companion Animal Behavior
Clinics Fourth Year clinics
2. Counsel owner behavioral/socialization needs*

*Sign-offs:
Any species

*Offered in Courses...:
VMC 927 Intro to Companion Animal Behavior

3. Counsel owner pet/animal selection*

*Sign-offs:
Any species

*Offered in Courses...:
VMC 927 Intro to Companion Animal Behavior

4. Observe, state if behavior normal/abnormal

*Sign-offs:
Any species

*Offered in Courses...:
VMC 927 Intro to Companion Animal Behavior
Communications/ Ethics

Be team member, passing grade team skills

Sign-offs:
N/A

Offered in Courses:
- VMP 922 Intro to Clinical Problem Solving
- VMC 932 Principles of Surgery
- Clinics Fourth Year clinics
Choose and calculate drug dosage

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMB 933/943 Pharmacology and Therapeutics
- VMB 954 Veterinary Toxicology & Poisonous Plants
- Clinics Fourth Year clinics

Write outpatient prescription

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMB 933/943 Pharmacology and Therapeutics
- VMB 954 Veterinary Toxicology & Poisonous Plants
- Clinics Fourth Year clinics
Clinical Nutrition

Articulate rationale: diet(s) vs. disease state(s)

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMB 965 Veterinary Nutritional Health

Demonstrate nutritional assessment

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMB 965 Veterinary Nutritional Health

Develop complete wellness lifestage feeding plan

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMB 965 Veterinary Nutritional Health

Identify/evaluate basic large animal foods types

**Sign-offs:**
- Large Animal

**Offered in Courses...:**
- VMB 965 Veterinary Nutritional Health

Clinical Competencies
Articulate rationale for diet recommendation

Sign-offs:
Any species

Offered in Courses...:
VMB 965 Veterinary Nutritional Health
Anesthesia/Analgesia: General

Perform anesthesia small animal

Sign-offs:
Small Animal

Offered in Courses:
VMC 932 Principles of Surgery
Anesthesia/Analgesia: Machines

Identify parts anesthesia machine

*Sign-offs:*

| N/A |

*Offered in Courses...:*  
VMC 932 Principles of Surgery  
Clinics Fourth Year clinics

Put together circle system

*Sign-offs:*

| N/A |

*Offered in Courses...:*  
VMC 932 Principles of Surgery
Demonstrate pain scoring

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMC 932 Principles of Surgery
- Clinics Fourth Year clinics

Intubate animal

**Sign-offs:**
- Small Animal

**Offered in Courses...:**
- VMC 932 Principles of Surgery
- VMC 957 Intro to Clinical Practice
- Clinics Fourth Year clinics

Perform local block

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMC 932 Principles of Surgery
- Clinics Fourth Year clinics

Place BP monitor

**Sign-offs:**
- Any species

**Offered in Courses...:**
- VMC 932 Principles of Surgery
- VMC 943/953 Lab Animal and Zoo/Special Species
- Clinics Fourth Year clinics
Anesthesia/Analgesia: Techniques

Place IV catheter small animal

Sign-offs:
Small Animal

Offered in Courses...:
VMC 932 Principles of Surgery
VMC 957 Intro to Clinical Practice
Clinics Fourth Year clinics

Place pulse ox unit

Sign-offs:
Any species

Offered in Courses...:
VMC 932 Principles of Surgery
VMC 957 Intro to Clinical Practice
Clinics Fourth Year clinics
Perform ELISA Test

Sign-offs:
Any species

Offered in Courses...:
VMC 932 Principles of Surgery
Clinics Fourth Year clinics
VMC 932
Principles of Surgery

Medicine: Techniques

Administer controlled drugs, do record keeping

**Sign-offs:**
Any species

**Offered in Courses...:**
VMC 932 Principles of Surgery
VMC 957 Intro to Clinical Practice
Clinics Fourth Year clinics

Calculate and administer IV fluids

**Sign-offs:**
Any species

**Offered in Courses...:**
VMC 932 Principles of Surgery
VMC 957 Intro to Clinical Practice
Clinics Fourth Year clinics

Demo IM medication administration

**Sign-offs:**
Any species
Small Animal

**Offered in Courses...:**
VMC 932 Principles of Surgery
Clinics Fourth Year clinics
Obtain blood sample

*Sign-offs:*

- Any species
- Dog

*Offered in Courses...:*

VMC 932 Principles of Surgery

Obtain cystocentesis

*Sign-offs:*

- Small Animal

*Offered in Courses...:*

VMC 932 Principles of Surgery
Surgery: Bandages

Wet to Dry bandage

Sign-offs:

Any species

Offered in Courses...:

VMC 932 Principles of Surgery
Demo friction knot

*Sign-offs:*

N/A

*Offered in Courses...:*

VMC 932  Principles of Surgery

Demo instrument tie

*Sign-offs:*

N/A

*Offered in Courses...:*

VMC 932  Principles of Surgery

Demo square knot

*Sign-offs:*

N/A

*Offered in Courses...:*

VMC 932  Principles of Surgery

Demo two hand tie

*Sign-offs:*

N/A

*Offered in Courses...:*

VMC 932  Principles of Surgery
Surgery: Procedures

A: Ovariohysterectomy

Sign-offs:
Dog

Offered in Courses:
VMC 932 Principles of Surgery

B: Castration

Sign-offs:
Dog

Offered in Courses:
VMC 932 Principles of Surgery
Surgery: Techniques

Demo drain placement

Sign-offs:
Any species

Offered in Courses...:
VMC 932 Principles of Surgery

Demo pack prep

Sign-offs:
N/A

Offered in Courses...:
VMC 932 Principles of Surgery

Demo patient prep

Sign-offs:
N/A

Offered in Courses...:
VMC 932 Principles of Surgery

Demo pencil grip

Sign-offs:
N/A

Offered in Courses...:
VMC 932 Principles of Surgery
Demo simple continuous

Sign-offs:

N/A

Offered in Courses:

VMC 932 Principles of Surgery

Demo simple interrupted

Sign-offs:

N/A

Offered in Courses:

VMC 932 Principles of Surgery

Demo sterile technique

Sign-offs:

N/A

Offered in Courses:

VMC 932 Principles of Surgery

Demo suture cutting

Sign-offs:

N/A

Offered in Courses:

VMC 932 Principles of Surgery
Demo three point grip

_Sign-offs:_
N/A

_Offered in Courses...:_
VMC 932 Principles of Surgery

Demo wound closure

_Sign-offs:_
Any species

_Offered in Courses...:_
VMC 932 Principles of Surgery
SS Design surgical anesthesia/analgesia regime

*Sign-offs:*
Amph/Reptile

*Offered in Courses...:*
VMC 943/953  Lab Animal and Zoo/Special Species

SS Perform anesthesia

*Sign-offs:*
Amph/Reptile
Small Mammal

*Offered in Courses...:*
VMC 943/953  Lab Animal and Zoo/Special Species
Anesthesia/Analgesia: Techniques

SS Intubate or assist

Sign-offs:

- Amph/Reptile
- Bird

Offered in Courses...:

VMC 943/953 Lab Animal and Zoo/Special Species
Medicine: Case Management

SS1 Define chief complaint and problem list

Sign-offs:
Spec species

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS2 Create differential diagnosis list

Sign-offs:
Spec species

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS3 Choose appropriate diagnostic tests

Sign-offs:
Spec species

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species
SS Choose and calculate drug dosage

*Sign-offs:*
- Amph/Reptile
- Bird
- Small Mammal

*Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS Cloacal Culture

*Sign-offs:*
- Bird

*Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS Demo IM medication administration

*Sign-offs:*
- Amph/Reptile
- Bird
- Small Mammal

*Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species
SS Demo IV injection

Sign-offs:
Small Mammal

Offered in Courses...:
VMC 943/953  Lab Animal and Zoo/Special Species

SS Demo SC medication administration

Sign-offs:
Amph/Reptile
Bird
Small Mammal

Offered in Courses...:
VMC 943/953  Lab Animal and Zoo/Special Species

SS Demo oral admin medicine (tablet, dose syringe)

Sign-offs:
Amph/Reptile
Bird
Small Mammal

Offered in Courses...:
VMC 943/953  Lab Animal and Zoo/Special Species
Medicine: Techniques

SS Obtain blood sample

Sign-offs:
- Amph/Reptile
- Bird
- Small Mammal

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS1 Calculate appropriate fluid amount

Sign-offs:
- Amph/Reptile
- Bird

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species
Necropsy

SS Perform necropsy

Sign-offs:

Spec species

Offered in Courses...:

VMC 943/953 Lab Animal and Zoo/Special Species
VMC 943/953
Lab Animal and Zoo/Special Species

Physical Exam: A General Exam

SS General physical exam

Sign-offs:
Amph/Reptile
Bird
Small Mammal

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS TPR, perform and know normal

Sign-offs:
Small Mammal

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species
VMC 943/953
Lab Animal and Zoo/Special Species

Restraint/Husbandry

Operate projectile drug delivery device

Sign-offs:
N/A

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species

SS Safely catch and restrain

Sign-offs:
Amph/Reptile
Bird
Small Mammal

Offered in Courses...:
VMC 943/953 Lab Animal and Zoo/Special Species
Collect fecal sample

**Sign-offs:**
Any species

**Offered in Courses...:**
VMP 930  Infection & Immunity III

Fecal centrifugation

**Sign-offs:**
Small Animal

**Offered in Courses...:**
VMP 930  Infection & Immunity III

Fecal direct smear

**Sign-offs:**
Any species

**Offered in Courses...:**
VMP 930  Infection & Immunity III

ID Microfilaria in blood drop

**Sign-offs:**
Dog

**Offered in Courses...:**
VMP 930  Infection & Immunity III
Parasitology

McMaster's technique

Sign-offs:

Horse
Small Ruminant

Offered in Courses:

VMP 930 Infection & Immunity III

Microscope technique for parasitology

Sign-offs:

Any species

Offered in Courses:

VMP 930 Infection & Immunity III
Articulate roles of public health/regulatory vet

Sign-offs:
N/A

Offered in Courses...:
VMP 945/958 Epi, Public Health, Emerging Exotic Disease

Create prevention/disease control plan

Sign-offs:
Population

Offered in Courses...:
VMP 945/958 Epi, Public Health, Emerging Exotic Disease

Demonstrate proficiency in outbreak investigation

Sign-offs:
N/A

Offered in Courses...:
VMP 945/958 Epi, Public Health, Emerging Exotic Disease

Educate lay person 5 diseases transmitted by food*

Sign-offs:
N/A

Offered in Courses...:
VMP 945/958 Epi, Public Health, Emerging Exotic Disease
Public Health

Educate lay person 5 zoonotic diseases*

Sign-offs:
N/A

Offered in Courses...:
VMP 945/958 Epi, Public Health, Emerging Exotic Disease

Obtain EEDA/USDA IAT certificate via online module

Sign-offs:
N/A

Offered in Courses...:
VMP 945/958 Epi, Public Health, Emerging Exotic Disease
Blood sample: PCV, TP

Sign-offs:
Any species

Offered in Courses...:
VMP 942 Veterinary Clinical Pathology
Clinics Fourth Year clinics

Blood smear differential, estimate platelet count

Sign-offs:
Any species

Offered in Courses...:
VMP 942 Veterinary Clinical Pathology

Blood smear: prepare and stain

Sign-offs:
Any species

Offered in Courses...:
VMP 942 Veterinary Clinical Pathology

Urine sample: reagent strip, SG, sediment exam

Sign-offs:
Any species

Offered in Courses...:
VMP 942 Veterinary Clinical Pathology
Physical exam: Onco

Do fine needle aspirate

**Sign-offs:**

Any species

**Offered in Courses...:**

- **VMC 951**  Companion Animal Medicine and Surgery I
- **Clinics**  Fourth Year clinics

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*Clinical Competencies*
Anesthesia/Analgesia: Machines

Put together non-rebreathing system

**Sign-offs:**

N/A

**Offered in Courses...:**

VMC 957 Intro to Clinical Practice
Anesthesia/Analgesia: Techniques

Intubate Cat

Sign-offs:
Cat

Offered in Courses:
VMC 957 Intro to Clinical Practice
Emergency/ICU

Abdominocentesis

*Sign-offs:*
Small Animal

*Offered in Courses...:
VMC 957 Intro to Clinical Practice

Calculate and administer nasal oxygen

*Sign-offs:*
Any species

*Offered in Courses...:
VMC 957 Intro to Clinical Practice

Demo technique emergency venous access

*Sign-offs:*
Any species

*Offered in Courses...:
VMC 957 Intro to Clinical Practice

Thoracocentesis

*Sign-offs:*
Small Animal

*Offered in Courses...:
VMC 957 Intro to Clinical Practice
Demo oral admin medicine Cat

Sign-offs:
Cat

Offered in Courses:
VMC 957 Intro to Clinical Practice

Obtain blood sample Cat

Sign-offs:
Cat

Offered in Courses:
VMC 957 Intro to Clinical Practice
Physical Exam: A General Exam

Do body condition score Cat

Sign-offs:
Cat

Offered in Courses...:
VMC 957 Intro to Clinical Practice

General physical exam Cat

Sign-offs:
Cat

Offered in Courses...:
VMC 957 Intro to Clinical Practice

TPR, perform and know normal Cat

Sign-offs:
Cat

Offered in Courses...:
VMC 957 Intro to Clinical Practice
Physical exam: CV

Take EKG, name parts

Sign-offs:
Small Animal

Offered in Courses:
VMC 957  Intro to Clinical Practice
Clinics  Fourth Year clinics
VMC 957
Intro to Clinical Practice

Restraint/Husbandry

Safely catch and restrain Cat

Sign-offs:
Cat

Offered in Courses...:
VMC 957 Intro to Clinical Practice
Surgery: Procedures

Castration Cat

Sign-offs: 
Cat

Offered in Courses...:
VMC 957 Intro to Clinical Practice

Ovariohysterectomy Cat

Sign-offs: 
Cat

Offered in Courses...:
VMC 957 Intro to Clinical Practice
Support bandage/splint

Sign-offs:

Small Animal

Offered in Courses...:

VMC 961 Companion Animal Medicine and Surgery II
1 Dental exam, chart lesions

Sign-offs:
Small Animal

Offered in Courses...:
VMC 965 Advanced Principles of Surgery

2 Tooth extraction

Sign-offs:
Small Animal

Offered in Courses...:
VMC 965 Advanced Principles of Surgery

3 Dental cleaning

Sign-offs:
Small Animal

Offered in Courses...:
VMC 965 Advanced Principles of Surgery
VMC 965
Advanced Principles of Surgery

Emergency/ICU

Tracheostomy

*Sign-offs:*

Any species

*Offered in Courses...:*

VMC 965 Advanced Principles of Surgery
Surgery: Bandages

Emergency limb bandage

Sign-offs:
Horse

Offered in Courses...:
VMC 965 Advanced Principles of Surgery
Surgery: Knots

Perform one hand surgical tie

Sign-offs:
N/A

Offered in Courses...
VMC 965  Advanced Principles of Surgery

Perform two hand surgical tie

Sign-offs:
N/A

Offered in Courses...
VMC 965  Advanced Principles of Surgery
Demo Cushing suture pattern

Sign-offs: N/A

Offered in Courses...:
VMC 965 Advanced Principles of Surgery

Demo Ford interlocking pattern

Sign-offs: N/A

Offered in Courses...:
VMC 965 Advanced Principles of Surgery

Demo Lembert suture pattern

Sign-offs: N/A

Offered in Courses...:
VMC 965 Advanced Principles of Surgery

Demo horiz mattress suture pattern

Sign-offs: N/A

Offered in Courses...:
VMC 965 Advanced Principles of Surgery
VMC 965
Advanced Principles of Surgery

Surgery: Techniques

Demo vert mattress suture pattern

Sign-offs:
N/A

Offered in Courses...:
VMC 965 Advanced Principles of Surgery
Physical exam: Repro

Conduct pregnancy exam

*Sign-offs:*
- Cow
- Dog
- Horse

*Offered in Courses...:*
- VMC 933 Theriogenology

Describe malpresentation, correct, place chains

*Sign-offs:*
- Large Animal

*Offered in Courses...:*
- VMC 933 Theriogenology

Examine external genitalia female

*Sign-offs:*
- Cow
- Dog
- Horse

*Offered in Courses...:*
- VMC 933 Theriogenology
Physical exam: Repro

Examine external genitalia male

Sign-offs:
- Cow
- Dog
- Horse

Offered in Courses...:
VMC 933 Theriogenology

Obtain and interpret vaginal smear

Sign-offs:
- Dog

Offered in Courses...:
VMC 933 Theriogenology

Prepare and evaluate semen dog, cow or horse

Sign-offs:
- Any species

Offered in Courses...:
VMC 933 Theriogenology
VMC 933
Theriogenology

Restraint/Husbandry

Counsel owner normal reproduction*

Sign-offs:
Any species

Offered in Courses...:
VMC 933 Theriogenology
Clinics Fourth Year clinics
VMB 931
Ethics, Animal Welfare & Social Responsibility

Anesthesia/Analgesia: Animal Welfare

Educate colleague welfare issue*

Sign-offs:
 Any species

Offered in Courses...:
 VMB 931 Ethics, Animal Welfare & Social Responsibility
Communications/ Ethics

Discuss ethical issue

*Sign-offs:*

| N/A |

*Offered in Courses...:*

| VMB 931 | Ethics, Animal Welfare & Social Responsibility |

Discuss legal/conflict issue

*Sign-offs:*

| N/A |

*Offered in Courses...:*

| VMB 931 | Ethics, Animal Welfare & Social Responsibility |

Educate lay person ethics issue*

*Sign-offs:*

| N/A |

*Offered in Courses...:*

| VMB 931 | Ethics, Animal Welfare & Social Responsibility |
Anesthesia/Analgesia: Animal Welfare

Participate euthanasia

*Sign-offs:*
Any species

*Offered in Courses...:*
Clinics Fourth Year clinics
Anesthesia/Analgesia: General

**Design chronic analgesia regime**

*Sign-offs:*

- Any species

*Offered in Courses...:*
  - Clinics Fourth Year clinics

**Design surgical anesthesia/analgesia regime**

*Sign-offs:*

- Large Animal
- Small Animal

*Offered in Courses...:*
  - Clinics Fourth Year clinics

**Perform anesthesia large animal**

*Sign-offs:*

- Large Animal

*Offered in Courses...:*
  - Clinics Fourth Year clinics
Anesthesia/Analgesia: Techniques

Calculate constant rate infusion drug

**Sign-offs:**
Any species

**Offered in Courses...:**
Clinics Fourth Year clinics

Perform epidural

**Sign-offs:**
Any species

**Offered in Courses...:**
Clinics Fourth Year clinics

Place ECG

**Sign-offs:**
Any species

**Offered in Courses...:**
Clinics Fourth Year clinics
Clinical Pathology

Blood sample: use glucometer

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics

Blood sample: Azostick

Sign-offs:
Small Animal

Offered in Courses...:
Clinics Fourth Year clinics
Clinics
Fourth Year clinics

Communications/ Ethics

Participate grief counseling or detailed explain

Sign-offs:
N/A

Offered in Courses...:
Clinics Fourth Year clinics
Dentistry

Dental exam, age animal using teeth

Sign-offs:
- Cow
- Horse

Offered in Courses...:
- Clinics
- Fourth Year clinics
Clinics
Fourth Year clinics

Emergency/ICU

Demo CPR

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics

Demo steps for hypovolemic/septic shock rx

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics
Clinics
Fourth Year clinics

Medicine: Case Management

A: Obtain complete history

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics

B: Define chief complaint/problem list

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics

C: Create differential diagnosis list

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics

D: Choose appropriate diagnostic tests

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics
**Clinical Competencies**

**Clinics**

**Fourth Year clinics**

**Medicine: Case Management**

**E: Create problem-oriented medical record**

*Sign-offs:*

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics

**F: Create treatment plan/daily treatment sheet**

*Sign-offs:*

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics

**G: Organized oral summary of case for peers**

*Sign-offs:*

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics

**H: Create laboratory flow sheet**

*Sign-offs:*

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics
Clinics
Fourth Year clinics

Medicine: Case Management

I: Follow patient through treatment

Sign-offs:
Any species

Offered in Courses:
Clinics Fourth Year clinics

J: Discuss case progress with client

Sign-offs:
Any species

Offered in Courses:
Clinics Fourth Year clinics

K: Provide 5 complete oral discharge instructions

Sign-offs:
Any species

Offered in Courses:
Clinics Fourth Year clinics

L: Write discharge instructions

Sign-offs:
Any species

Offered in Courses:
Clinics Fourth Year clinics
**Clinics**

**Fourth Year clinics**

**Medicine: Case Management**

**M: Perform followup phone calls**

**Sign-offs:**

Any species

| | | | |

**Offered in Courses...:**

| Clinics | Fourth Year clinics |

**Record a case involving a population of animals**

**Sign-offs:**

N/A

| | |

**Offered in Courses...:**

| Clinics | Fourth Year clinics |
**Clinics**

**Fourth Year clinics**

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**Medicine: Patient Type**

5 days non-emergent medical primary care clinic

*Sign-offs:*

N/A

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**Offered in Courses...:**

Clinics  Fourth Year clinics

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Help manage 5 medicine referral patients

*Sign-offs:*

Any species

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**Offered in Courses...:**

Clinics  Fourth Year clinics

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Express anal sacs

*Sign-offs:*

- Dog

*Offered in Courses...:*

- Clinics
- Fourth Year clinics
Clinics
Fourth Year clinics

Necropsy

Collect biopsy sample 3 tissue types

*Sign-offs:*

N/A

*Offered in Courses...:*

Clinics    Fourth Year clinics

Collect sample microbiological testing

*Sign-offs:*

N/A

*Offered in Courses...:*

Clinics    Fourth Year clinics

Perform complete necropsy

*Sign-offs:*

Mammal
Species

*Offered in Courses...:*

Clinics    Fourth Year clinics
Clinics
Fourth Year clinics

Physical exam: CV

Obtain blood pressure awake animal

Sign-offs:
Small Animal

Offered in Courses...:
Clinics        Fourth Year clinics
1: General dermatologic exam

**Sign-offs:**

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics

2: Recognize primary, secondary lesions

**Sign-offs:**

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics

3: Otic exam, ID tympanic membrane

**Sign-offs:**

Small Animal

**Offered in Courses...:**

Clinics Fourth Year clinics

4: Skin cytology, tape/swab/aspiration

**Sign-offs:**

Any species

**Offered in Courses...:**

Clinics Fourth Year clinics
Clinics
Fourth Year clinics

Physical exam: Derm

5: Skin scraping, deep, superficial

*Sign-offs:*

Any species

*Offered in Courses...:*

Clinics Fourth Year clinics

6: Otic cytology

*Sign-offs:*

Any species

*Offered in Courses...:*

Clinics Fourth Year clinics

7: Collect samples for bacterial / fungal culture

*Sign-offs:*

Any species

*Offered in Courses...:*

Clinics Fourth Year clinics

8: Woods lamp exam

*Sign-offs:*

Any species

*Offered in Courses...:*

Clinics Fourth Year clinics

Clinical Competencies
Physical exam: Derm

9: Trichogram

Sign-offs:

Any species

Offered in Courses...:

Clinics  Fourth Year clinics
Public Health

Evaluate environmental issues (see front piece)*

Sign-offs:
N/A

Offered in Courses...:
Clinics        Fourth Year clinics
Clinics
Fourth Year clinics

Radiology

Position, create, process, interpret radiograph

Sign-offs:
Any species

Offered in Courses...:
Clinics Fourth Year clinics
Clinics
Fourth Year clinics

Restraint/Husbandry

Counsel owner biological needs*

*Sign-offs:

Any species

Offered in Courses...:

Clinics Fourth Year clinics
Extramural Extramural Studies

Counsel owner core vaccines*

*Sign-offs:

Any species

Offered in Courses...:

Clinics Fourth Year clinics
Extramural Extramural Studies

Counsel owner parasite control*

*Sign-offs:

Any species

Offered in Courses...:

Clinics Fourth Year clinics
Extramural Extramural Studies

Demonstrate counseling potential owner*

*Sign-offs:

Any species

Offered in Courses...:

Clinics Fourth Year clinics
Surgery: Procedures

Assist referral surgery

Sign-offs:
Any species

Offered in Courses:
Clinics Fourth Year clinics
Surgery: Techniques

Remove sutures or staples

Sign-offs:

Any species

Offered in Courses:

Clinics        Fourth Year clinics
Other
Required Experiences

Communications/ Ethics

Attend, reflect on approved diversity program, 1/year

Sign-offs:
N/A

Offered in Courses...:
Other Required Experiences
Other
Required Experiences

Research

Advisor sign-off on research experience

Sign-offs:
N/A

Offered in Courses...:
Other  Required Experiences
Other
Required Experiences

Surgery: Procedures

List surgery as primary surgeon 1: ________________

Sign-offs:
Any species

Offered in Courses...:
Other Required Experiences

List surgery as primary surgeon 2: ________________

Sign-offs:
Any species

Offered in Courses...:
Other Required Experiences

List surgery as primary surgeon 3: ________________

Sign-offs:
Any species

Offered in Courses...:
Other Required Experiences

List surgery as primary surgeon 4: ________________

Sign-offs:
Any species

Offered in Courses...:
Other Required Experiences
Other
Required Experiences

Surgery: Procedures

List surgery as primary surgeon 5:________________

Sign-offs:
Any species

Offered in Courses...:
Other Required Experiences

List surgery as primary surgeon 6:________________

Sign-offs:
Any species

Offered in Courses...:
Other Required Experiences