

### *Request for Review of Teaching Protocol*

Starting Date: **Winter quarter 1998, updates effective Winter quarter 2018**

## Veterinary Technology

Department

(509) 574-4758

PI's phone number

**Hazardous materials:** None \_\_\_\_\_ Infectious agents \_\_\_\_\_ Carcinogens \_\_\_\_\_ Radioisotopes \_\_\_\_\_  
Other X Pesticides, flammable agents, disinfectants \_\_\_\_\_

Category	Levels of Pain, Discomfort, or Distress
<u>  X  </u> C	<b>The procedures involve no pain, discomfort, distress, or use of pain-relieving drugs.</b> Includes simple invasive procedures (e.g., injection, blood sampling), short-term restraint, physical exams.
<u>      </u> D	<b>The procedures involve accompanying pain or distress for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.</b> Includes anesthetic survival surgery without significant post-operative pain and/or functional deficit (e.g., spay, castration, exploratory abdominal surgery), implantation of urinary catheters, longer term physical restraint (30-90 minutes) of awake animals.
<u>      </u> E	<b>The procedures involve accompanying pain or distress for which use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, or research tests.</b> Includes major anesthetic survival surgery with significant post-operative pain and/or functional deficit (e.g., orthopedic surgery on femur, amputation, invasion of large muscle mass), tumor inducement, radiation sickness, or toxicity testing.

Signature certifies that the Principal Investigator has carefully considered the alternatives to the use of live animals and that the project will be conducted in full accordance with federal policy and regulations governing the use of live vertebrate animals for research and teaching purposes. The proposed activities will not unnecessarily duplicate previous procedures.

8-29-17

Date \_\_\_\_\_

**For IACUC use only**                      Date received \_\_\_\_\_  
    Expedited review \_\_\_\_\_      Full committee review \_\_\_\_\_

Comments: \_\_\_\_\_

**Approval Signature** \_\_\_\_\_      **Date** \_\_\_\_\_

# Yakima Valley College Animal Subjects Approval Form

Name of Principle Investigator/Responsible Faculty Advisor <b>Kelley Denome, D.V.M.</b>	Phone # <b>(509)574-4758</b>	Department <b>Veterinary Technology</b>	Fax # <b>(509)574-4751</b>
Co-investigator	<b>OFFICE USE ONLY:</b>		
	APPROVED BY:		
	DATE:		
Title(s) of Proposal <b>VET 103 ANIMAL CARE LAB I</b>			

Start Date: Fall Quarter 1998, updates effective Winter Quarter 2018

Is this a renewal/reapplication of a previously approved project? YES X NO       

If a renewal, are there any changes to the previous project? YES X NO       

## 1. Animal Procurement, Classification, and Numbers:

List All Species & Strains of Animals	Source(s) of Animals	Number of Animals Used Per Quarter		
		Fall	Winter	Spring
<b>Canine</b>	<b>Yakima Humane Society</b>	<b>40-60</b>		
<b>Feline</b>		<b>40-60</b>		
<b>Rodents, Rabbits, Birds</b>	<b>Loan, Purchase, Donation, HS</b>	<b>0-30</b>		

2. Animal Housing Area: Technology Complex, Building 24, Rooms 102 A, B, C, D

Dogs and cats will be obtained from the Yakima Humane Society on an as needed basis. The animals will be returned to them upon completion of our use. The Humane Society will deliver the animals on the first day of the instructional week and will pick them up on Friday or the end of the instructional week. The Humane Society will be compensated for the expenses incurred in transporting the animals only.

Rodents, rabbits, and birds will be obtained through the Humane Society, donations, loans, or purchased. They may be returned or adopted out at the end of their stay.

## 3. Purpose of Study: Please answer all parts of question #3 in NON-SCIENTIFIC TERMS.

*Attach additional pages if necessary for completeness. Incomplete answers or unanswered questions may cause the approval form to be returned, tabled or not approved.*

A). How would you explain to a non-scientist, the specific objective(s) of your project/class? In what ways might this project benefit the advancement of

**knowledge, the good of society, or human/animal health? What value may come from this work?**

Accreditation standards set by the AVMA require students to be trained in maintenance of basic cleanliness and orderliness of a veterinary facility, including cages, kennels, and stalls, restraint techniques, provide routine record-keeping, care, and observation of hospitalized patients, and preparation of food. This course will also provide the maintenance of those animals used in the other Vet Tech courses.

**B). Justify the following:**

**I. Rationale For The Use Of Animals:**

*Why must animals be used? Why not cell cultures, computer models, etc...?*

Accreditation standards set by the AVMA require use of animals and dictate which live species must be used for which procedure. Use of models or computer simulations may be used prior to students' application of skills on live animals, but does not allow the students to apply skills of restraint, behavioral modification, nor actual practice of maintaining the cleanliness of a veterinary facility.

**II. Appropriateness of Species To Be Used:**

*Describe the biological characteristics of the animal species selected that justifies its use in the proposed study/class? Cost should not be used as a justification, except as a means to choose among species that are equally well-suited for the proposed project.*

Dogs and cats will be used during this course as these are the most common species encountered in a normal veterinary practice. A variety of ages and breeds will be used to enhance this learning experience. Rabbits, guinea pigs, hamsters, mice, rats, and birds may also be used during the course. Accreditation standards require the use of dogs, cats, rats, rabbits, mice, birds, plus recommends other laboratory animal species for the procedures taught in this course.

**III. Number Of Animals To Be Used:**

*How did you determine the number of animals required?*

The number of students enrolled in the program determines the number of animals per quarter. Students will work in small groups, decreasing the number of animals needed while still providing an adequate learning situation.

**4. Alternatives To Live Animal Use:**

The Animal Welfare Act and the Public Health Service Policy require that the principal investigator consider alternatives to procedures that may cause more than momentary or slight pain or distress to the animals. If you have listed animals under TYPE C, D, or E, on the first page of this approval document, you must provide a written narrative description. This narrative description must provide details on the methods you used and sources consulted to determine that alternative procedures, i.e., less painful and/or distressful, are not available or acceptable. Examples of sources might include a literature search, review of scientific journals, discussions with colleagues, etc. **However, as a minimum, the database(s) used to search the literature for alternatives and keywords used MUST be listed and results noted.** Attach additional pages if necessary for completeness.

Accreditation standards set forth by the American Veterinary Medical Association (AVMA) require use of certain species for these procedures. Models will be used prior to animal use where appropriate.

**5. Study Areas: Housing** – Describe where animals are housed, including how requirements for exercise, social interaction, and adequate space are met.

There are 6 dog runs measuring 5 ft x 3 ft (15 square feet) in the main dog ward (102B), and 2 in the respiratory dog ward (102C), with an additional run measuring 5 ft x 30 inches. There is one 28in x 44.5 in (8.63 square feet) kennel in the respiratory dog ward that may be utilized for drying dogs after bathing; it may also be used to house smaller dogs if needed. There will be 3 - 10 dogs in residence during the instructional weeks with 5 being most typical. They will be housed in 102B except those having clinical signs of infectious diseases will be housed separately in 102C.

Formula: (Dog length in inches + 6 inches) squared = size required for primary housing.  
in square inches divided by 144 = size required in square feet.

Example: Beagle measuring 22inches from tip of nose to base of tail  
(22+6 inches) x (22+6 inches) = 784 sq. inches  
784 sq. inches/144 sq. inches = 5.4 sq. feet required primary housing.

The runs will house a dog 40 inches long adequately. The large cages can house a dog up to 29 inches long and no taller than 21 inches.

There will usually be 4 - 10 cats in residence during the instructional weeks with 5-6 being most typical. The cats will be housed in 102A. These numbers will vary depending on the procedure being taught that week and the available space. Feline housing will consist of 48 in x 28.3 in or 36 in x 28.3 in condos including a 12 in x 28.3in separate litter area.

Guinea pig cages will be at least 7" in height and meet the following minimum floor space standards. They will be housed in 102D – the exotic ward.

<b>Guinea Pig weight</b>	<b>Min. Floor space in square inches</b>
<350 grams	60
>350 grams	101
Nursing females with litters	101

Hamster cages will be at least 6" in height and meet the following minimum floor space standards. They will be housed in 102 D.

<b>Hamster weight</b>	<b>Min. Floor space in square inches</b>
<60 grams	10
60 – 80 grams	13
80 – 100	16
>100 grams	19

Rabbits used for this course will be maintained in the same cages used for the cats, or in individual cages meeting the below standard. All cages must be at least 14" in height. They will be housed in either 102A (cat ward) or D (exotic ward)

<b>Rabbit weight</b>	<b>Min. Floor space (sq. feet)</b>
<b>Kg</b>	<b>Pounds</b>
<2	<4.4
	1.5

2 – 4	4.4 – 8.8	3.0
4 – 5.4	8.8 – 11.9	4.0
>5.4	>11.9	5.0

Our smaller cat condos will adequately house rabbits up to 11.9 pounds (5.4kg) and rabbits over this weight in the larger condos.

Other rodents will be housed in standard cages with sufficient space to allow each animal to make normal postural and social adjustments with freedom of movement. They will be maintained in 102D, the exotic ward.

## 6. Exercise Plan

Dogs:

The runs will provide adequate space for exercise for a dog 27in. long or for compatible dogs totaling 40in. in length. All dogs will be walked by Vet Tech students at least three times a day for no less than 15 minutes each time unless a procedure prevents a walk. They will normally be exercised approximately 6:30 AM, between 11:30 AM and 1 PM, and between 3:30 and 5:30 PM. Dogs will be double leashed for walks. Students must clean up all feces defecated immediately and prevent the dogs from any destructive behavior while on the walks. This is a positive time for the dogs and provides good social interaction for them.

CATS & SMALL MAMMALS:

Cats and small mammals do not require an exercise program. The cats will not have prolonged stays here, so no formal exercise program is necessary. The students will be encouraged to allow the cats time to play during cleaning times and when they have time to spend with them. The small mammals will be provided with wheels and other means of exercise if their stay with us is prolonged.

A). Will animals be taken to a laboratory/study area outside the animal housing facility?

YES   X   NO       

IF YES, list building name Technology Complex, Building 24, Room 101, 102, 103, 103A, 103B, 103C, and 105B

## 7. Veterinary Care:

**Name of Veterinarian(s) Providing Medical Care To Your Animals:**

*Emergencies, illness, preventive medicine*

**Kelley McGlade-Denome, D.V.M.**

**Susan M. Wedam, D.V.M.**

**Carol Wilson, D.V.M.**

## 8. Animal Use Procedures:

*Describe techniques and methods, how animals will be monitored, if required, restraint, administration of anesthetics and sedatives, pain control, drug administration, duration of procedures and post-procedural/post-surgical care.*

All animals will have procedures tracked within the medical record. Procedure limits for each individual animal have been established and are inclusive for all protocols the animals are involved in while on our premises. Please refer to the Procedure Limits document for specifics.

Students will provide daily cleansing of the cages and runs used by the animals, plus clean-up as needed at the noon and afternoon checks. Animals will be fed at least once daily in the morning except puppies and kittens, which will be fed 2-3 times daily. Students will be given instruction in determining proper amounts and types of food to give each animal. Water will be provided at all times except in instances where the animal repeatedly spills it. In this situation the water will be offered three times per day. Dogs and cats scheduled for anesthetic procedures will be fasted 6-12 hours prior.

The students will be provided demonstrations and instruction in the proper method to perform physical examinations and to determine temperature, respiration, and pulse rates. They will chart these values and additional observations on each dog and cat daily. Animals that are fearful or aggressive may have a more limited physical examination, at the discretion of a staff member.

Any regulated species, such as guinea pigs, hamsters, and rabbits, will be observed daily, including weekends, and days of non-instruction. Observations will be recorded daily and physical exam data as instructed by the veterinarian or instructor. The small exotics and rodents will be housed in 102D and will be provided 12 hours of light daily with the use of a light timer.

Female dogs and cats may have the ventral abdominal area clipped by the students or staff to assist in determining the presence of a midline scar. Students will receive instruction in detecting presence of a midline scar, which may indicate a previous laparotomy (abdominal surgery). This will assist in making a judgment on probable spay status, and provides additional clipper use training for the students.

### **Use of Bark Collars**

Rarely there are dogs that continuously bark in spite of use of positive behavioral rewards and do not respond to corrections such as use of a water squirt from a bottle. These dogs then interfere with the ability to conduct class in the adjoining labs. At the veterinarian's discretion the use of a bark collar may be used. These collars have adjustable settings so that the lowest shock can be used as a negative consequence to inappropriate barking. The collars can only be triggered if both vibrations from the dog and the noise of a bark are simultaneous, thus preventing another barking dog from triggering a shock. The students will be trained in appropriate use prior to their placement on any dog.

### **Bathing/Grooming**

Students will perform basic and therapeutic grooming, bathing, and dipping. This will include expressing anal sacs, cleaning of the ears, and nail trimming. Students will receive instruction on proper technique in VET 121, taken concurrently.

### **Pain Management**

At the direction of the veterinarian, pain management medication will be administered to animals exhibiting pain. It may be given subcutaneously or orally as needed. As the

procedures are not normally painful, it is not anticipated that it will be needed. It may be used on animals that have pathology upon entry into the Program's wards and the use of the anti-inflammatory would increase their comfort. Please refer to the current Anesthesia Dosage Chart.

### **Injections and Blood Collection**

Students will be allowed to participate in injections and venipuncture required for care of live animals after adequate instruction and development of expertise in other courses. Students may participate in injections via subcutaneous, intramuscular, intradermal, and intravenous routes.

Subcutaneous: The skin is wiped with alcohol and a "tent" is made by lifting up the skin with one hand. The needle is inserted through the skin, negative pressure is applied to verify correct placement (no air or blood aspirated) and the solution is injected. Alternately a needle attached to an IV fluid line may be used to administer SQ fluids for treatment of dehydration.

Intramuscular: The skin is wiped with alcohol and the muscle is stabilized with the non-dominant hand. The needle is inserted through the skin into the muscle, negative pressure is applied to verify correct placement (no blood aspirated) and the solution is injected.

Intradermal: The skin is stretched or gently pinched to stabilize. The needle is inserted slightly into the skin and the solution is injected.

Venipuncture: The skin may be clipped to facilitate visualization of the vein. The skin is wiped with alcohol. The vein is raised either with a tourniquet or pressure with finger(s). The needle is inserted into the vein and blood is collected, or an appropriate solution is administered after verifying correct placement by aspirating blood. Pressure is applied over the venipuncture site. Venipuncture will also be used for blood collection. Veins that will be utilized include: jugular, cephalic, and saphenous.

### **Topical Administration**

Ophthalmic solution & ointment administration: The animal is restrained in either a sitting or standing position or in ventral recumbency (lying on their belly). The eyelids are held open and ophthalmic solutions can be dropped onto the cornea. Ointments will be placed either directly on the cornea or onto the conjunctiva. In either case, the tip of the applicator is not to touch the surface of the eye or conjunctiva.

Skin: Application of medication to the skin may be performed in various positions (standing, sitting, dorsal recumbency on the back) to allow for visualization of the area of application. The hair is parted and the medication is applied directly to the skin.

### **Other Medical Procedures**

Treatment of parasites/wounds/disease processes (e.g. abscesses, respiratory disease, musculoskeletal disease, etc.) will be performed as deemed appropriate by the Attending Veterinarian. These treatments will provide opportunity for learning, and treatments such as topical, oral, or injectable medication administration; wound cleaning; bandaging, etc. may be performed by students after appropriate instruction.

### **Fractious Cats**



Trazadone may be administered orally to facilitate handling and physical examination of fractious cats. See Anesthetic Dosage chart.

## 9. Method Of Euthanasia and Disposition of Animals:

*Special method, agent dosage and route*

Animals originating from the Yakima Humane Society (YHS) will generally be returned at the end of each week of instruction for adoption. In instances where animals need further follow-up, supervision, or care they will remain here until that time it is deemed medically appropriate to return them. Should someone express interest in adopting any animals held in our facilities, they will be instructed to take the proper procedures to do so once the animal has been returned to YHS.

If animals are ever euthanized, they will be given an injection of euthanasia solution via intravenous, intracardiac (sedated or anesthetized animals only), or intraperitoneal routes. Bodies may be returned to YHS for disposal or disposed of following local guidelines. Small lab animal and exotic species may also be euthanized by anesthetic gas overdose or administration of a lethal dose of anesthetic drug (rat or mouse mix of ketamine/xylazine). Refer to the current Anesthesia Dosage Chart.

## 10. Personnel Qualifications

Name: Kelley McGlade-Denome, D.V.M. Role: Instructor– Vet Tech Program

Degree(s): D.V.M. Washington State University 1996  
B.S. in Veterinary Science Washington State University 1993

Brief Outline of Experience: **A practitioner in mixed and small animal practices since 1996, Veterinary Technology Instructor since 1999.**

## Principal Investigator Assurance

Information contained in this document are an accurate description of my animal care and use protocol. I assure that the procedures using live animals on this protocol will be performed under the supervision of a qualified scientist. I agree to provide adequate training to employees under my supervision in humane methods of animal care and use. Analgesic, anesthetics, and tranquilizing drugs and veterinary care will be provided where indicated and appropriate to minimize pain, discomfort and illness. The proposed activities will not unnecessarily duplicate previous procedures.

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date