

# SMALL ANIMAL DIAGNOSTIC IMAGING I CLINICAL MENTORSHIP



## VM 21500

# CRITERIA HANDBOOK AND LOGBOOK

# INDEX OF NOTEBOOK

## Student Information

- Goals of SA Diagnostic Imaging Clinical Mentorship
- Contact person at Purdue University
- Pre-requisites for VM 21500
  - ❖ Contracts and agreements
  - ❖ Technical standards
  - ❖ Insurance
- Selection of Clinical Mentorship site – facility criteria
- Selection of Mentorship Supervisor
- Materials – The Criteria Handbook and Logbook
- Completion of SA Diagnostic Imaging I Mentorship

## Clinical Mentorship Tasks

### Introduction to Essential Tasks and Criteria

1. Film loading and unloading
2. Cleaning of intensifying screens
3. Film labeling
4. Film presentation for reading radiographs of the abdomen, thorax, skull, spine, and pelvis
5. Film presentation for reading radiographs of the extremities
6. Safety procedures/caliper use\*
7. Lateral thorax image\*
8. VD Thorax image\*
9. Lateral abdomen image\*
10. VD abdomen image\*
11. Project: Automatic Processor Quality Control

### **NOTE THE FOLLOWING DUE DATES FOR THE TASKS ABOVE:**

***Fall or Spring semester                      5:00p.m. Thursday of week 4 – Tasks 1-6***

***5:00p.m. Thursday of week 8 – Tasks 7-10***

***5:00p.m. Thursday of week 12 – Task 11***

***Summer session                                5:00p.m. Thursday of week 2 – Tasks 1-6***

***5:00p.m. Thursday of week 4 – Tasks 7-10***

***5:00p.m. Thursday of week 6 – Task 11***

***Incomplete grades will not be assigned for mentorships at the end of the semester.***

***Grade penalties will be assessed for tasks submitted after the due date.***

***Resubmission due dates will be set by the instructor as required.***

***\*IMPORTANT! See following page for Animal Use Guidelines***

## **Animal Use Guidelines**

The student shall abide by the following guidelines when performing mentorship tasks:

1. A mentorship task may be performed only once on a single animal.
2. A student may perform a maximum of ten (10) minimally invasive tasks (denoted by one asterisk) on a single animal within a 24-hour period.
3. A student may perform a maximum of three (3) moderately invasive tasks (denoted by two asterisks) on a single animal within a 24-hour period.
4. When combining tasks, a student may perform a maximum of five (5) minimally and three (3) moderately invasive tasks on a single animal within a 24-hour period.
5. Tasks denoted with no asterisks do not involve live animal use.

For example, a student might perform the following tasks on an animal in a single day:

1. Restrain a dog in sternal recumbency\*
2. Restrain a dog in lateral recumbency\*
3. Restrain a dog for cephalic venipuncture\*
4. Restrain a dog for saphenous venipuncture\*
5. Restrain a dog for jugular venipuncture\*
6. Administer subcutaneous injection\*\*
7. Administer intramuscular injection\*\*
8. Intravenous cephalic injection – canine\*\*

Failure to comply with the Animal Use Guidelines may result in failure of the Clinical Mentorship.

# STUDENT INFORMATION

## GOALS OF VM 21500 SA DIAGNOSTIC IMAGING I CLINICAL MENTORSHIP

Working with a veterinary care facility, the student will perform tasks under the supervision of a clinical mentor (veterinarian or credentialed veterinary technician).

In order to achieve the goals for this Clinical Mentorship, the tasks must be performed to the level of competency as outlined by the *Criteria* for each task.

The student is responsible for providing documentation for each task as defined by the *Materials Submitted for Evaluation and Verification* section on each task.

In addition to the documentation, the Clinical Mentorship site supervisor will verify that the student performed the task under their supervision.

Final approval of successful performance and completion of the Clinical Mentorship will be made by the Purdue University instructor in charge of the Clinical Mentorship. This approval will be based upon the documentation provided by the student.

The Purdue University instructor in charge has the option to require additional documentation if, in their judgment, the student has not performed and/or documented the task to the level set by the *Criteria*.

Documentation of completed tasks is essential to validating the educational process and insuring that the performance of graduates of the Veterinary Technology Distance Learning Program meets the standards of quality required by the Purdue University College of Veterinary Medicine faculty and the American Veterinary Medical Association accrediting bodies.

## CONTACT PERSON

Any questions regarding the Clinical Mentorship process should be directed to:

Pam Phegley, BS, RVT  
Purdue University  
Veterinary Technology Program  
625 Harrison Street, Lynn Hall G171  
West Lafayette IN 47907  
(765) 496-6809  
phegleyp@purdue.edu

# PRE-REQUISITES FOR VM 21500 SA DIAGNOSTIC IMAGING I CLINICAL MENTORSHIP

## Contracts and Agreements

Because of legal, liability and AVMA accreditation issues, the following documents must be completed *prior to beginning* the Clinical Mentorship

1. Facility Requirement Agreement
2. Clinical Mentorship Agreement
3. Supervisor Agreement
4. Health Risk and Insurance Acknowledgment
5. Professional Liability Insurance Coverage
6. Agreement and Release of Liability
7. Technical Standards Acknowledgment
8. Code of Conduct

These forms are available on the VTDL website for downloading, printout, and completion.

If more than one Clinical Mentorship course is taken, a separate Facility Requirement Agreement, Clinical Mentorship Agreement and Supervisor Agreement must be completed for each course.

*Failure to complete and return the listed documents and the payment for Student Professional Liability Insurance Coverage will prevent the student from enrolling in the Clinical Mentorship.*

## Insurance

Two types of insurance are recommended or required for the student working in a Clinical Mentorship.

Health Insurance is highly recommended to cover the medical expenses should the student become injured while on the job. It is the student's responsibility to procure such insurance.

Liability Insurance is required to protect the student in the event of a suit filed against the student for acts he/she performed while in the Clinical Mentorship.

Each VTDL student is required to purchase, for a nominal fee, Professional Liability Insurance through Purdue University. This is done by completing the Professional Liability Insurance Coverage form and sending a check for the fee. This check must be separate from payment of course fees. The fee covers from the time of initiation of coverage until the subsequent July 31<sup>st</sup>.

Students will not be enrolled in Clinical Mentorships until the Professional Liability Insurance is paid, and the student is covered by the policy.

# SELECTING THE CLINICAL MENTORSHIP SITE – FACILITY REQUIREMENTS

You must visit the Clinical Mentorship Site and determine if the following supplies and equipment are readily available to you for use during your Clinical Mentorship. You must complete and have the facility veterinarian sign the Clinical Mentorship Site Facility Requirements Agreement.

The veterinary care facility must be equipped with the following equipment:

- Practical Diagnostic Imaging for Veterinary Technicians by Han/Hurd (textbook)
- 300MA/125KVP X-ray machine (high-output machine for analog or digital radiography)
- Intensifying screens with compatible film (no specifics)
- Screen cleaning solution (Lint free cloth i.e. 4x4, solution or distilled H<sub>2</sub>O)
- Measuring calipers
- Thyroid shields (2)
- 0.5mm Lead aprons (2)
- 0.5mm Lead gloves that provide 360° coverage of hands (2 pr)
- Right and Left identification markers
- Patient Identification Labeling system for analog (film and screen) or for digital images
  
- Radiation exposure monitoring device (badge, ring, etc)

# SELECTION OF CLINICAL MENTORSHIP SUPERVISOR

The Clinical Mentorship Supervisor is the person who will sign your Logbook and verify performance of tasks at the Clinical Mentorship site. This person must be a credentialed veterinary technician (have graduated from an AVMA accredited program or met State requirements for credentialing as a veterinary technician) or a licensed veterinarian.

An individual who claims to be a “veterinary technician” but has not met the criteria for credentialing above is not eligible to be a mentorship supervisor.

The individual is not considered to be an employee of Purdue University when acting as your Clinical Mentorship supervisor.

Each Clinical Mentorship Supervisor must complete the *Clinical Mentorship Supervisor Agreement*. You must return this agreement with the other agreements prior to beginning your Clinical Mentorship.

Should your Clinical Mentorship Supervisor change during the course of the Clinical Mentorship, you will need to have your new supervisor complete a *Clinical Mentorship Supervisor Agreement* and return it to the Purdue VTDL office. These forms are available on the VTDL website for downloading and printing.

# CRITERIA HANDBOOK AND LOGBOOK

This Criteria Handbook and Logbook contains the list of tasks that must be successfully completed in order to receive credit for this Clinical Mentorship. You are expected to have learned the basics of how, why, and when each procedure is to be done from the courses listed as pre-requisites for this Clinical Mentorship. This booklet contains the directions and forms that must be followed and completed in order to meet the standards set for successful completion of this Clinical Mentorship.

Please read each component of each task carefully before doing the task to minimize the number of times you have to repeat the task. The components of each task are summarized:

**Goal** – Describes the ultimate outcome of the task you will perform.

**Description** – Lists the physical acts that you will perform, and under what conditions these acts will be completed.

**Criteria** – Lists specific, observable, objective behaviors that you must demonstrate for each task. Your ability to demonstrate each of these behaviors will be required in order to be considered as having successfully completed each task.

**Number of Times Task Needs to be Successfully Performed** – States the required number of times to repeat the tasks. The patient's name and the date each repetition of the task was performed must be recorded on the Task Verification Form.

**EACH REQUIRED REPETITION OF THE TASK MUST BE PERFORMED ON A DIFFERENT ANIMAL.** You cannot use the same animal to do all of the repetitions of a task. However, you can use the same animal to perform different tasks. In other words, you can't do three ear cleanings on the same animal, however, you can do an ear cleaning, an anal sac expression, and a venipuncture on the same animal.

**Materials Submitted for Evaluation and Verification** – These specific materials, which usually include video or other materials, must be submitted to demonstrate that you actually performed the task as stated. Each evaluation states specifically what must be shown in the submitted materials.

*The Purdue University course instructor for this Clinical Mentorship has the option to request further documentation if the submitted materials do not clearly illustrate the required tasks.*

It is recommended that the video materials document all angles of the procedure. The purpose of the video and other material is to provide "concrete evidence" that you were able to perform the task to the standard required.

If you do not own a video camera, one may be borrowed or rented. Pre-planning the video procedures will help reduce the need to redo the video documentation. Explain what you are doing as you perform the video documentation, as narration will help the evaluator follow your thought process and clarify what is seen on the video. Voiceovers may be done to clearly explain what is being performed. At the beginning of each task, clearly announce what task you are doing, or insert a written title in the video.

Videotapes, photographs, radiographs, slides, written projects, the Criteria Handbook and Logbook and any other required documentation will not be returned. These items will be



kept at Purdue as documentation of the student's performance for accreditation purposes.

This validation is essential to help the Purdue VTDL meet AVMA accreditation criteria. Therefore, it is essential that you follow the evaluation and validation requirements.

**Task Verification Forms** – Each task has a form that must be completed and signed by the Clinical Mentorship Supervisor.

**Supplementary Materials** – Logs, written materials, photographs, or other forms/documentation may be required for specific tasks. Be sure to read the Materials to be Submitted for Evaluation section very carefully and return all documented evidence as prescribed.

# COMPLETION OF THE CLINICAL MENTORSHIP

Mentorship logbooks include due dates for sections of courses. Each section must arrive at Purdue by the deadline (not a postmark date).

Paperwork may be

- FAXed to 765-496-2873
- e-mailed to [phegleyp@purdue.edu](mailto:phegleyp@purdue.edu)
- sent by regular mail to 625 Harrison Street, Lynn Hall G171, West Lafayette, IN 47907

Videos may be submitted

- in the Media Gallery of Blackboard. If submitted on Blackboard, send an e-mail to [phegleyp@purdue.edu](mailto:phegleyp@purdue.edu) notifying of the submission. ***This is the preferred method of online submission***, since it does not limit how much you put on, is no cost to you, and automatically archives here. You must assign the videos to the correct course in order for the instructor to view them.
- by an online source such as Dropbox. If a password is required to open videos submitted with an online service, email the password to [phegleyp@purdue.edu](mailto:phegleyp@purdue.edu). These methods may not be acceptable if they cannot be archived.
- by sending on a disc or flash drive by regular mail to 625 Harrison Street, Lynn Hall G171, West Lafayette, IN 47907

Late submissions will incur a grade penalty. Incomplete grades will no longer be assigned for mentorships at the end of each semester.

Feedback will be emailed until all tasks are completed successfully. A hard copy will be sent when the course is complete and a grade is assigned. As necessary, instructors may require resubmission of some tasks. When feedback is sent, due dates for resubmissions will be given. *It is crucial that students with pending feedback check their Purdue emails frequently so this information is received in a timely manner.*

Final approval of successful performance and completion of the Clinical Mentorship will be made by the Purdue University instructor in charge of the Clinical Mentorship based upon the documentation provided by the student.

Upon successful completion of all tasks in the clinical mentorship course, a grade will be assigned by the course instructor based upon the documented performance of the tasks.

# CLINICAL MENTORSHIP TASKS

## INTRODUCTION TO ESSENTIAL TASKS AND CRITERIA

Before starting each task:

1. Read the Goal, Description, Criteria, and Materials to be Submitted for Evaluation and Verification. Understand what is expected of you for each task.
2. Make sure you have whatever equipment and supplies you need to document the task. Pay particular attention to the details of what needs to be documented and submitted.
3. Make sure you obtain appropriate permissions where necessary. Please inform the facility's owner/manager of your activities. A good relationship with the veterinarian in charge is key to having a positive Clinical Mentorship experience.

After performing each task:

4. Label all items submitted so that the materials you submit for evaluation and validation at Purdue are identified as your submission.
5. Label all videos posted to Blackboard with the name of the task performed.
6. Submit materials to Purdue by the deadlines listed in the logbooks.

# CLINICAL MENTORSHIP PROJECTS

## INTRODUCTION TO SPECIAL PROJECTS

Certain mentorships will have required projects to complete in addition to the required tasks. These are things that are better assessed in the form of a project. Projects should be typed, and checked for correct grammar and spelling.

Before starting each project

1. Read through the project in its entirety. This will give you a description of the project and what is needed to complete it successfully.
2. Determine what materials, if any, need to be submitted for completion of the project.
3. Most projects will come with a list of questions that need to be answered. The responses should be placed inside the notebook for submission with other materials.
4. If videotaping is required for a project, it should be noted on the videotape verbally that this is for the project and not another required task. Some projects may require a verbal narration of a student doing something. Each individual project will define if that is a necessary requirement for that project.

Note: Videotaping and photographs are not for the purpose of verifying if the practice is within OSHA compliance or other government regulations. These projects are for the student's education. It may be determined by the student that the practice is not within the current

recommendations. The purpose of these projects is to make the student aware of these issues, and how to recognize the issues and develop suggestions for improvement.

There will be certain mentorships where OSHA recommendations, in regards to equipment and policies, will be facility requirements for the mentorship.

# 1. LOADING/UNLOADING FILM

**Goal:** To correctly load and unload radiographic film from a cassette

**Description:** The student will remove radiographic film from a cassette and reload with correct size and type of film

**Note:** The student may simulate this task with an exposed film and the room light on if criteria cannot be seen on the video with the light off. The student must explain clearly what would be done if the cassette was actually being loaded in a dark room.

**Criteria:** The student extinguished the room light and turned on the safe light before opening the cassette

The student opened the cassette according to manufacturer's instructions without damaging the cassette or film

The student removed the film from the cassette, handling the corners only, and did not damage the film or screen

The student reloaded the cassette with film.

The student removed the appropriate size unexposed film from the box, while handling the corners only, and did not damage the film or screen

The student closed the cassette securely without trapping a part of the film in the cassette lid

The student placed the lid securely back on the film box or closed the film bin before the room light was turned back on

**Number of Times Task Needs to be Successfully Performed:** 1

**Materials Submitted for Evaluation and Verification:**

1. Task Verification form for Loading/Unloading Film skill, signed by the clinical mentorship supervisor
2. One video submission clearly showing all listed criteria, narrated by the student.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 2. CLEANING OF INTENSIFYING SCREEN

**Goal:** To properly clean intensifying screens with the correct cleaning solution

**Description:** The student will use an empty cassette and clean the intensifying screen with the proper cleaning solution

**Criteria:** The student selected the appropriate cleaner for use on the intensifying screen as described in the textbook

Using an empty cassette, the student used the appropriate amount of cleaning fluid (to minimize waste and properly complete the task) and used a lint-free cloth to clean the screen

The student cleaned the entire intensifying screen area

The student did not damage the intensifying screen during the cleaning process

The student stood the cassette on its edge and allowed the screen to dry completely before putting film into the cassette

**Number of Times Task Needs to be Successfully Performed:** 1

**Materials Submitted for Evaluation and Verification:**

1. Task Verification form for Cleaning of Intensifying Screen skill, signed by the Clinical Mentorship supervisor.
2. One video showing the student cleaning the intensifying screen. The video should clearly show the materials and technique used to clean the intensifying screen. The student should state verbally what solution is used for cleaning.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

### 3. LABELING AND IDENTIFICATION OF RADIOGRAPHIC FILM

**Goal:** To correctly label a radiograph with patient and hospital information according to hospital procedures and legal requirements.

**Description:** The student will use whatever technique is available to them to label the radiograph. A minimum of the client's name, patient's name, date of exposure, and hospital information must be clearly identified.

**Criteria:** The student applied identification to the radiograph ***prior to*** developing of flat film, or prior to exposure when using a digital imaging system.

The student included in the identification: the client's name, patient's name, date of exposure, and hospital information.

The student's handwriting (where used) is easily legible

For identification techniques that require exposure of the label to the primary beam, the student placed the label such that the label was exposed, legible on the exposed film, and was not overlapping vital images on the radiograph.

For identification techniques that occur after exposure and before processing and use identification cards, the identification card was placed such that the information appeared on the developed film.

The student applied proper identification markers for left and right sides (L or R) and oblique marker if appropriate, in the film emulsion (before exposure).

**Number of Times Task Needs to be Successfully Performed:** 1

**Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Labeling and Identification of Radiographic Film skill, signed by the Clinical Mentorship supervisor.
2. One processed film or digital image with the appropriate labeling as defined in the criteria, clearly marked to be evaluated for labeling task.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_

RVT, CVT, LVT  
DVM, VMD

**Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

#### 4. FILM PRESENTATION FOR VIEWING RADIOGRAPHS OF THE ABDOMEN, THORAX, SKULL, SPINE AND PELVIS

- Goal:** To place radiographs on the viewer or computer screen so that the veterinarian has the proper orientation for interpretation of the radiographs.
- Description:** The student will place radiographs on the viewer or computer screen such that a lateral radiograph has the cranial side to the left and caudal to the right; and a VD or DV radiograph has the right side of the animal to the viewer's left. ***Radiographs must include appropriate markers to identify right and left.***
- Criteria:**
- The student placed a lateral abdominal radiograph such that dorsal was up, and the cranial aspect of the animal was to the viewer's left
- The student placed a VD or DV abdominal radiograph such that cranial was up, and the animal's right side was to the viewer's left.
- The student placed a lateral thoracic radiograph such that dorsal was up, and the cranial aspect of the animal was to the viewer's left.
- The student placed a VD or DV thoracic radiograph such that cranial was up, and the animal's right side was to the viewer's left.
- The student placed a lateral skull radiograph such that dorsal was up, and the cranial aspect of the animal was to the viewer's left.
- The student placed a VD or DV skull radiograph such that cranial was up, and the animal's right side was to the viewer's left.
- The student placed a lateral spine radiograph such that dorsal was up, and the cranial aspect of the animal was to the viewer's left.
- The student placed a VD or DV spine radiograph such that cranial was up, and the animal's right side was to the viewer's left.
- The student placed lateral pelvic radiograph such that dorsal was up, and the cranial aspect of the animal was to the viewer's left.
- The student placed a VD or DV pelvic radiograph such that cranial was up, and the animal's right side was to the viewer's left.

**Number of Times Task Needs to be Successfully Performed:** 1 for each view

**Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Film Presentation for Viewing Radiographs of the Abdomen, Thorax, Skull, Spine and Pelvis skill, signed by the Clinical Mentorship supervisor.
2. One video of each view listed in the criteria. The video will show the student taking the previously developed radiograph out of the folder and placing it on the view box in the correct orientation, or manipulating the image on the computer. The video should then go to the image to verify correct placement. ***The student must narrate each presentation using correct anatomical and directional terminology.***



**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_

RVT, CVT, LVT  
DVM, VMD

**Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 5. FILM PRESENTATION FOR VIEWING RADIOGRAPHS OF THE STIFLE JOINT AND THE RADIUS/ULNA

- Goal:** To place radiographs on the viewer or computer screen so that the veterinarian has the proper orientation for interpretation of the radiographs.
- Description:** The student will place radiographs on the viewer or computer screen such that a lateral radiograph of an extremity has the cranial or dorsal side of the limb to the left, and the proximal aspect of the limb is up. For caudocranial, craniocaudal, dorsopalmar or dorsoplantar view, the lateral side of the animal's left limb is to the viewer's right, and the lateral side of the animal's right limb is to the viewer's left.
- Note:** *Radiographs must include appropriate marks to identify right and left limbs.*
- Criteria:** The student placed the radiograph such that a lateral stifle radiograph had the cranial or dorsal side of the limb to the left and the proximal aspect of the limb up.
- The student placed the radiograph such that a caudocranial view of the stifle had the lateral side of the left limb to the viewer's right, or the lateral side of the right limb to the viewer's left, and the proximal aspect up. *Note: VD pelvis view including the stifles is not acceptable positioning for this, as it is a craniocaudal view.*
- The student placed the radiograph such that a lateral view of the radius/ulna had the cranial or dorsal side of the limb to the left and the proximal aspect of the limb up.
- The student placed the radiograph such that a craniocaudal view of the radius/ulna had the lateral side of the left limb to the viewer's right, or the lateral side of the right limb to the viewer's left, and the proximal aspect up.

**Number of Times Task Needs to be Successfully Performed:** 1 for each view

### Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Film Presentation for Viewing Radiographs of the Stifle and Radius/Ulna skill, signed by the Clinical Mentorship supervisor.
2. One video of each view listed in the criteria. The video will show the student taking the previously developed radiograph out of the folder and placing it on the view box in the correct orientation, or manipulating the image on the computer. The video should then go to the image to verify correct placement. The student must narrate each presentation using correct anatomical and directional terminology.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 6. SAFETY PROCEDURES / CALIPER USE

**Goal:** To accurately measure a patient for a radiographic view and set the machine to produce a diagnostic radiograph, while employing proper safety procedures to protect personnel

**Description:** The student will demonstrate measuring a patient with calipers, selecting the machine setting, and use of proper safety procedures

**Criteria:** The student followed standard safety procedures as defined in the textbook

The student positioned the patient for the radiographic view

The student placed the calipers at the highest point of the area to be radiographed after the patient was properly positioned for the radiographic view

The student accurately read the caliper measurement according to manufacturer's instructions

The student selected the machine setting according to the practice standard operating procedure for producing a diagnostic radiograph

**Number of Times Task Needs to be Successfully Performed:** 1

**Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Safety Procedures and Caliper Use skill, signed by the Clinical Mentorship supervisor
2. One video of the procedure. The student will narrate, describing the safety procedures utilized, as well as the steps in measuring the patient and setting the machine.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 7. LATERAL THORAX IMAGE

**Goal:** To produce a diagnostic lateral radiograph of the thorax

**Description:** The student will position the animal in right lateral recumbency and produce a lateral radiograph of diagnostic quality

**Note:** *Both dog and cat radiographic positioning must be demonstrated. Of the thorax and abdomen views submitted, two images must be dogs and two must be cats.*

**Digital imaging may be used to produce this image. If digital imaging is used, the student may NOT crop the image post-exposure or use computer-editing software. Appropriate collimation should be done when producing the image.**

**Criteria:** The student positioned the animal in right lateral recumbency

If multiple sizes of cassettes are available, the student selected a size cassette appropriate for the size of the animal to be radiographed. If multiple sizes are not available, the student appropriately collimated the primary beam to include only the landmarks for thoracic radiographs as defined in the textbook.

The student extended the front limbs cranially so that the elbow was not superimposed over the thoracic cavity on the radiograph

The student had the head and neck in a natural position such that the neck was neither extended nor flexed.

The student had the animal positioned so that the sternum and dorsal spinous processes were in a plane parallel to the table (the animal was not rotated).

The student made the radiograph at peak inspiration

The student made the radiograph such that the image included the manubrium as the cranial landmark, and halfway between xiphoid and last rib as the caudal landmark. The image should include the entire lung field from the sternum to the thoracic spinal column

The student used the correct exposure technique to visualize the bronchial vasculature.

No part of the lead glove or positioner appears on the radiograph.

**Number of Times Task Needs to be Successfully Performed:** 2

**Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Lateral Thorax Image skill, signed by the Clinical Mentorship supervisor.
2. **One** processed lateral thoracic radiograph or digital image. Submit only one image, demonstrating the most diagnostic that was produced.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 8. VENTRODORSAL THORAX IMAGE

**Goal:** To produce a diagnostic ventrodorsal radiograph of the thorax

**Description:** The student will position the animal in ventrodorsal position and produce a ventrodorsal radiograph of diagnostic quality.

**Note:** *Both dog and cat radiographic positioning must be demonstrated. Of the thorax and abdomen views submitted, two images must be dogs and two must be cats.*

**Digital imaging may be used to produce this image. If digital imaging is used, the student may NOT crop the image post-exposure or use computer-editing software. Appropriate collimation should be done when producing the image.**

**Criteria:** The student positioned the animal in a ventrodorsal position.

If multiple sizes of cassettes are available, the student selected a size cassette appropriate for the size of the animal to be radiographed. If multiple sizes are not available, the student appropriately collimated the primary beam to include only the landmarks for thoracic radiographs as defined in the textbook.

The student extended the front limbs cranially so that the forelimbs are not obstructing the thorax and the lead gloves are out of the primary beam and not visible in the radiograph.

The student had the animal positioned so that the sternum and dorsal spinous processes were superimposed in a plane perpendicular to the table (the animal was not rotated).

The student made the radiograph at peak inspiration.

The student made the radiograph such that the image included the manubrium as the cranial landmark, and halfway between xiphoid and last rib as the caudal landmark. The image should include the entire lung field.

The student used the correct exposure technique to visualize the bronchial vasculature.

No part of the lead glove or positioner appears on the radiograph.

**Number of Times Task Needs to be Successfully Performed:** 2

### Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Ventrodorsal Thorax Image skill, signed by the Clinical Mentorship supervisor.
3. **One** processed ventrodorsal thoracic radiograph or digital image. Submit only one image, demonstrating the most diagnostic that was produced.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 9. LATERAL ABDOMEN IMAGE

**Goal:** To produce a diagnostic lateral abdominal radiograph

**Description:** The student will position the animal in right lateral recumbency and produce a lateral abdominal radiograph of diagnostic quality.

**Note:** *Both dog and cat radiographic positioning must be demonstrated. Of the thorax and abdomen views submitted, two images must be dogs and two must be cats.*

***Digital imaging may be used to produce this image. If digital imaging is used, the student may NOT crop the image post-exposure or use computer-editing software. Appropriate collimation should be done when producing the image.***

**Criteria:** The student positioned the animal in right lateral recumbency.

If multiple sizes of cassettes are available, the student selected a size cassette appropriate for the size of the animal to be radiographed. If multiple sizes are not available, the student appropriately collimated the primary beam to include only the landmarks for abdominal radiographs as defined in the textbook.

The student extended the rear limbs caudally so that the femur was not superimposed over the caudal abdominal cavity on the radiograph.

The student had the animal positioned so that the sternum and dorsal spinous processes were in a plane parallel to the table, and the wings of the ilium were superimposed (the animal was not rotated).

The student made the radiograph at expiration.

The student made the radiograph such that the image included the three rib spaces cranial to the xiphoid as the cranial landmark, and greater trochanter as the caudal landmark. The image should include the entire abdomen.

The student used the standard operating procedure exposure technique to visualize the soft tissue contrast.

No part of the lead glove or positioner appears on the radiograph.

**Number of Times Task Needs to be Successfully Performed:** 2

**Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Lateral Abdomen Image skill signed by the Clinical Mentorship supervisor.
2. **One** processed lateral abdominal radiograph or digital image. Submit only one image, demonstrating the most diagnostic that was produced.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_



I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 10. VENTRODORSAL ABDOMEN IMAGE

**Goal:** To produce a diagnostic ventrodorsal radiograph of the abdomen.

**Description:** The student will position the animal in ventrodorsal position and produce a ventrodorsal abdominal radiograph of diagnostic quality.

**Note:** *Both dog and cat radiographic positioning must be demonstrated. Of the thorax and abdomen views submitted, two images must be dogs and two must be cats.*

**Digital imaging may be used to produce this image. If digital imaging is used, the student may NOT crop the image post-exposure or use computer-editing software. Appropriate collimation should be done when producing the image.**

**Criteria:** The student positioned the animal in a ventrodorsal position.

If multiple sizes of cassettes are available, the student selected a size cassette appropriate for the size of the animal to be radiographed. If multiple sizes are not available, the student appropriately collimated the primary beam to include only the landmarks for abdominal radiographs as defined in the textbook.

The student extended the rear limbs caudally so that the rear limbs were not obstructing the abdomen, and the lead gloves were out of the primary beam and not visible in the radiograph.

The student had the animal positioned so that the sternum and dorsal spinous processes were superimposed in a plane perpendicular to the table (the animal was not rotated).

The student made the radiograph during expiration.

The student made the radiograph such that the image included the three rib spaces cranial to the xiphoid as the cranial landmark, and greater trochanter as the caudal landmark. The image should include the entire abdomen.

The student used the standard operating procedure exposure technique to visualize the soft tissue contrast.

No part of the lead glove or positioner appears on the radiograph.

**Number of Times Task Needs to be Successfully Performed:** 2

### Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Ventrodorsal Abdomen Image skill, signed by Clinical Mentorship supervisor.
2. **One** processed ventrodorsal abdominal radiograph or digital image. Submit only one image, demonstrating the most diagnostic that was produced.

**Student Name:** \_\_\_\_\_

**Supervisor Name:** \_\_\_\_\_ RVT, CVT, LVT  
DVM, VMD

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_ **Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

I verify that the student performed these tasks under my supervision.

**Signature of Clinical Mentorship Supervisor:** \_\_\_\_\_

## 11. VM 21500 PROCESSING PROJECT

The student will answer the following questions regarding maintenance of an automatic processor:

- a. What should be performed during routine maintenance of an automatic processor? Give a list of steps performed each time there is routine maintenance.
- b. Give a description of the steps you would take to troubleshoot a jammed film in an automatic processor.
- c. Describe what could cause the following artifacts, and what you would do to correct the problem:
  1. Fine, straight black or white lines all through the developed film
  2. Portion of film overexposed (black)
  3. Inadequate density; even background is too light
  4. Gray, cloudy, swirly appearance over entire developed film
  5. Part of film OK, one section of film underdeveloped, with wavy appearance
  6. Overall dull, gray "fogged" appearance; inadequate contrast and density