

# PARASITOLOGY MENTORSHIP



VM 21400

# CRITERIA HANDBOOK AND LOGBOOK

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## Clinical Mentorship Tasks

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9. Fecal Exam Project

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

***Fall or Spring semester***

***11:59 p.m. ET Thursday of week 1 – Task 1***

***11:59p.m. Thursday of week 6 – Tasks 2-4***

***11:59p.m. Thursday of week 10 –Tasks 5-9***

***Summer session***

***11:59 p.m. ET Thursday of week 1 – Task 1***

***11:59p.m. Thursday of week 4 – Tasks 2-4***

***11:59p.m. Thursday of week 8 – Tasks 5-9***

***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. All animals used for demonstration of mentorship skills must be appropriately restrained by another person, for the safety of the patient and the student.
2. A mentorship task may be performed only once on a single animal.
3. 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.
4. 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.
5. 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.
6. 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.

### CONTACT PERSON

Questions regarding the overall Clinical Mentorship process should be directed to  
Pam Phegley, BS, RVT  
Clinical Mentorship Coordinator  
(765) 496-6809  
phegley@purdue.edu

Questions regarding this mentorship (tasks, due dates, etc.) should be directed to the instructor for this mentorship course.

# STUDENT INFORMATION

## GOALS OF VM 21400

### PARASITOLOGY CLINICAL MENTORSHIP

Working with a small animal veterinary care facility, the student will practice several 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 submitted videos should demonstrate proficiency in performing skills that have been learned and practiced until the student feels comfortable. While occasional guidance from the mentor is acceptable during the learning phase, video submissions must show that the student can execute the task independently, smoothly, and competently without excessive direction or outside assistance. All tasks must be performed without reliance on the Task Verification Form or other written sources during the video. Video demonstration of each skill should reflect the ability to perform the skill autonomously, as would be expected in clinical practice.

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 validate the educational process and insure that the performance of graduates of the Veterinary Nursing 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.

Essential criteria for each skill are denoted by (critical) and must be included in the performance of the skill in order for the task to be approved. Failure to demonstrate any (critical) steps clearly will result in resubmission of the task. Critical components include actions or omissions that would compromise patient or personal safety, cause potential immediate harm to the patient or personnel, demonstrate a serious breach of infection control protocols, show a fundamental lack of knowledge of performance of the task, or fail to demonstrate required AVMA essential skills.

Live narration of videos is expected for all submissions. If a student wishes to submit a video with voice-over they must contact the instructor prior to making the video to discuss whether an exception may be made. Certain tasks require live narration, and exceptions will not be made for those.

Continuous, unedited video is preferred, and is required for some tasks. Required continuous, unedited video will be noted in the task description. If video is not continuous, the student must ensure that all criteria are demonstrated in the video clips.

# PRE-REQUISITES FOR VM 21400 PARASITOLOGY CLINICAL MENTORSHIP

## Agreements

Because of legal, liability and AVMA accreditation issues, the following Forms must be submitted prior to beginning the Clinical Mentorship:

1. Clinical Mentorship and Facility Requirement Agreement: This form must be completed by the facility owner or designee
2. Clinical Mentorship Supervisor Agreement: This form must be completed by the licensed DVM or credentialed veterinary technician that will be your supervisor
3. Student Acknowledgement Form: This form is completed by the student
4. Professional Liability Insurance Coverage: This form is completed by the student

Links to these Forms are available on the VNDL website.

Please note the following:

- There is a Clinical Mentorship and Facility Requirement Agreement specific to each clinical mentorship course.
- More than one mentorship supervisor may sign the mentorship logbook. Each mentorship supervisor must be either a DVM or a credentialed technician and must complete a separate Clinical Mentorship Supervisor Agreement.
- **If you are registering for multiple clinical mentorship courses in a semester AND you are only using ONE mentorship supervisor, then only one Clinical Mentorship Supervisor Agreement needs to be submitted.**

*Failure to complete and submit the listed Forms and/or non-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 VNDL student is required to purchase, for a nominal fee, Professional Liability Insurance through Purdue University. 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. The mentorship supervisor will verify the availability of required items by completing the Mentorship and Facility Requirement Agreement.

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

- Tubes or vials for fecal flotation
- Centrifuge
- 15 mL centrifuge tubes
- Flea comb
- Heartworm antigen diagnostic test (type used in the practice)
- Microscope with 10X, 40X, 100X objectives

The veterinary care facility must be equipped with the following **items**:

- Latex gloves (non-sterile)
- Sterile cotton-tipped applicators
- Sterile saline
- Microscope slides
- Cover slips
- Fecal flotation solution (type used in the practice)
- Cheesecloth or gauze
- Small paper cups
- Wax pencil or crayon
- Disposable plastic pipets
- White paper towel
- 2% formalin or 10% formalin to dilute to 2%
- New Methylene Blue stain
- EDTA blood tubes

# SELECTION OF THE 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 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 a *Clinical Mentorship Supervisor Agreement*. These agreements must be submitted prior to beginning the Clinical Mentorship. Multiple supervisors may be used for documentation of mentorship tasks. Each supervisor must complete a separate agreement.

Should the Clinical Mentorship Supervisor change during the course of the Clinical Mentorship, the student will need to have the new supervisor complete a *Clinical Mentorship Supervisor Agreement* and submit to the Purdue VNDL office.

***ALL TASKS PERFORMED FOR A MENTORSHIP SHOULD BE OBSERVED IN PERSON BY A SUPERVISOR FOR WHOM DOCUMENTATION HAS BEEN SUBMITTED***

# 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. Essential criteria for each skill are denoted by (critical) and must be included in the performance of the skill in order for the task to be approved. Failure to demonstrate any (critical) steps clearly will result in resubmission of the 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.

Pre-planning the videos will help reduce the need to resubmit tasks. The student should narrate the video as they work, explaining what they are doing and why. This helps the evaluator follow the thought process and clarify what is seen on the video. The student's face must be shown at some point in every video to verify their identity. The name and/or number of the task should be either stated at the beginning of the video or embedded (written) into the video itself.

This validation is essential to help the Purdue VNDL 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 sets of tasks. Each set must be submitted by the deadline listed in the logbook. Late submissions will incur a grade penalty. Incomplete grades will not be assigned for mentorships at the end of each semester.

Feedback will be posted to the Brightspace assignment following review of each task. As necessary, instructors may require resubmission of some tasks. When feedback is posted, due dates for resubmissions will be given. ***It is crucial that students with pending feedback set their Brightspace to notify them when feedback and scores are posted, 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.

***Note: A student who is dismissed from their mentorship facility may fail the course and may be dismissed from the program.***

**Task Verification forms** and other written materials should be submitted in ***Assignments*** in Brightspace. Task Verification forms are due by the task due date in order for each task to be complete. You must assign the forms and any other supplemental paperwork required for the tasks, to the correct course assignment in order for the instructor to view them.

**Videos** should be submitted in ***Assignments*** in Brightspace. This method of online submission does not limit how much you put on, is no cost to you, and automatically archives. You must assign the videos to the correct course assignment in order for the instructor to view them.

**Patient proof of rabies vaccination** should be submitted in ***Assignments*** in Brightspace for all patients used for mentorship tasks by unvaccinated students. This is due by the task due date. Patient ID, age, date of vaccination, and either type of vaccine (1- or 3-year) or due date for booster must be shown.

**OSHA Compliance** should be demonstrated in videos and photographs submitted. The student should always be aware of workplace safety and compliance. Violations such as human food and drink in hospital areas, unlabeled secondary containers, lack of PPE, etc. will be noted and may result in point deductions or task resubmission.

## Using Kaltura for Video Assignments

**Kaltura** is a secure streaming service that Purdue offers for faculty, staff, and students. Videos uploaded to an assignment via Kaltura will only be accessible to instructor(s) within the course.

### Step 1: Set Video Type on Your Device

Confirm your device is recording in a format accepted by Kaltura; common formats include:

- .MOV/.MP4/.M4V • .WMV
- .AVI
- .WEBM

**Kaltura cannot accept the HEVC video format.**

iPhone/iPad:

- *Click* on **Settings->Camera->Formats**
- *Change* the format to **Most Compatible**.

Android:

- In your camera application's settings, *change* the video recording format to **MOV, M4V, or MP4**.

Desktop/Laptop:

- Depending on your recording application, you will need to save your video recording as a common video format (such as .mp4, .mov, or .m4v).

### Step 2: Allow your Browser to use Pop-Up Windows

Confirm your browser has pop-ups enabled. Kaltura will pop open a window for you to upload your video. Use the *Help* feature in your preferred browser if you need assistance in enabling pop-up windows.

**If you do not allow pop-up windows on your browser, you will not be able to upload videos.**

### Step 3: Ensure You Have a Stable High-Speed Internet Connection

Confirm you have a **stable** internet connection; if you are on a connection that can disconnect on a regular basis your upload may be cancelled. Additionally, you will need to have a **high-speed** connection. Videos may have large file sizes, and a slow connection may result in your video taking a very long time to upload. If you need a stable and fast internet connection but do not have one at home, consider using public wifi at a library or coffee shop.

### Step 4: Uploading Your Task Verification Form (TVF)

You must upload your TVF at the same time that you upload your video.

- *Open* the assignment in Brightspace
- *Click* on the "**Add a File**" button. A dialogue box will open allowing you to select the TVF file to upload from your device.

### Step 5: Uploading Your Video

Once you have uploaded your TVF, you can upload your video. Scroll down on the page to the Comments area.

- *Click* on the **Insert Stuff** icon on the text editor.
- On the **Insert Stuff** menu that opens, *click* on **Add Kaltura Media**.
- On the **Insert Stuff** window, *click* the **plus** button. On the menu that opens, *click* **Media Upload**.
- The **Upload Media** window will open. *Click* on **Choose a file to upload** to select a file on your computer, or *click and drag* the video file into the box.
- Depending on your internet connection speed and the file size, it may take a few minutes to upload the file. **Allow the file to upload completely and do not close the window.**

You may alter the name of the file and add a description.

Once the file is uploaded and any name or description changes have been made, *click* **Save and Embed** to save the video to Kaltura.

- If your video has processed, you may see a preview. Otherwise, you may see an animation that your video is still processing. Even if the video is still processing, you can still submit the video. *Click* **Insert** to add the video to the assignment or discussion
- Your video will be added to the text box. *Click* **Submit** to turn in your assignment.
- You may confirm your submission by clicking on the link to the assignment or discussion and seeing if you can view the video.

**For Support**

Contact the PVM Instructional Design team at [pvmit@purdue.edu](mailto:pvmit@purdue.edu) for assistance.

# 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 perform the task including PPE (**wear gloves, most parasites are zoonotic**). 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 Brightspace with the name of the task performed.
6. Submit materials to Purdue by the deadlines listed in the course syllabus.

# 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.

# 1. VIDEO VERIFICATION OF REQUIRED EQUIPMENT AND SUPPLIES

**Goal:** Ensure that the student will have access to all equipment and supplies necessary to complete the skills in this course.

**Description:** The student will provide a narrated video showing equipment and supplies specific to this mentorship, to verify that required items are available to them and adequate for completion of tasks in their facility.

**Criteria:** The student introduced the video and showed their face clearly **(critical)**

The student walked through the facility and showed the following clearly **(critical)** :

- Tubes or vials for fecal flotation
- Centrifuge
- 15 mL centrifuge tubes
- Heartworm antigen diagnostic test (**must be ran in-house – cannot send out**)
- Microscope with 10X, 40X, 100X objectives
- Fecal flotation solution (type used in the practice)
- Cheesecloth or gauze
- 2% formalin or 10% formalin to dilute to 2%
- New Methylene Blue stain

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

## **Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Video Verification of Required Equipment and Supplies, signed by the Clinical Mentorship supervisor.
2. One video showing the student as they introduced themselves and walked through the facility, showing the listed items clearly. The student narrated the video live as they showed items.

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

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

RVT, CVT, LVT  
DVM, VMD

I verify that the student will have access to the items shown, for tasks in this course.

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

## 2. PERFORM DIRECT WET MOUNT HEARTWORM DIAGNOSTIC TEST

**Goal:** To successfully set up a direct blood smear heartworm diagnostic test and interpret the result.

**Description:** The student will perform a direct blood smear heartworm diagnostic test and interpret the result.

**Criteria:** The student placed a drop of anticoagulated blood and one drop of saline to dilute the blood in the center of a microscope slide. **(critical)**

The student placed a cover slip over the drop of blood. **(critical)**

The student placed the slide on a microscope and examined the area of the slide at 10X power, and recorded any microfilariae (they would be moving) found in the sample, **verbally stating the result if positive or no microfilaria seen. (critical)**

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

### Materials Submitted for Evaluation and Verification:

1. Task verification form for Perform Direct Blood Smear Heartworm Diagnostic Test task, signed by the Clinical Mentorship supervisor.
2. A video that clearly shows the student performing a direct blood smear heartworm diagnostic test as defined in the above criteria for this task. The student will narrate to explain each step of the test.

**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. PERFORM HEARTWORM ELISA DIAGNOSTIC TEST

**Goal:** To successfully set up a heartworm ELISA diagnostic test and interpret the result.

**Description:** The student will perform a heartworm ELISA diagnostic test according to the clinic SOP for heartworm testing.

**Criteria:** The student performed heartworm ELISA diagnostic testing according to the clinic SOP for heartworm testing. **(critical)**

The student verbally described each step as it was performed. **(critical)**

The student correctly interpreted the result of the heartworm test, as well as stating the result (heartworm antigen detected or not detected). Please give full interpretation if using ELISA vector test i.e. IDEXX 4DxPlus. **(critical)**

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

**Materials Submitted for Evaluation and Verification:**

3. Task verification form for Perform Heartworm ELISA Diagnostic Test task, signed by the Clinical Mentorship supervisor.
4. A video that clearly shows the student performing a heartworm ELISA diagnostic test as defined in the above criteria for this task, including all steps in the clinic SOP. The student will narrate to explain each step of the test.
5. Written clinic SOP for heartworm antigen diagnostic testing.
6. If a commercially prepared heartworm antigen testing kit is used, provide the following information: Product name, Manufacturer, Copy of manufacturer's instructions for performing the test.

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

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

RVT, CVT, LVT  
DVM, VMD

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

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

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

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

## 4. PERFORM MODIFIED KNOTT'S HEARTWORM DIAGNOSTIC TEST

**Goal:** To successfully set up a Modified Knott's heartworm diagnostic test and interpret the result.

**Description:** The student will perform a Modified Knott's heartworm diagnostic test and interpret the result.

**Criteria:** The student used a 15ml centrifuge tube and added 10ml of 2% formalin to 1ml of anticoagulated blood (or 5mL of 2% formalin to 0.5mL anticoagulated blood). 10% buffered formalin may be diluted with water to make a 2% solution. **(critical)**

The student capped the centrifuge tube and inverted it several times to thoroughly mix.

The student placed the tube in the centrifuge and spun the mixture for 5 minutes at 1000–1500 rpm. **(critical)**

The student slowly poured the supernatant from the tube without disturbing the sediment layer at the bottom.

The student used a pipet to add a drop of new methylene blue stain to the sediment, then used the pipette to mix the stain with the sediment. **(critical)**

The student used a pipet to transfer a drop of the sediment-stain mixture to a microscope slide.

The student placed a cover slip over the sediment-stain mixture.

The student placed the slide on a microscope and examined the area of the slide at 10X power, and recorded any microfilariae (they would be stationary) found in the sample, **verbally stating the result and what you're looking for/purpose of test (why do you need to know how to distinguish between the two types of microfilaria?)**. 40x power should be used to differentiate from *Dipetalonema* and *Dirofilaria immitis*.

**If your test is no microfilaria seen, then verbally state how you would distinguish between the two types of microfilaria. (critical)**

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

### Materials Submitted for Evaluation and Verification:

7. Task verification form for Perform Heartworm Modified Knott's Diagnostic Test task, signed by the Clinical Mentorship supervisor.
8. A video that clearly shows the student performing a Modified Knott's heartworm diagnostic test. The student will narrate to explain each step of the test.

**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. PERFORM VISUAL EXAM FOR EXTERNAL PARASITES

**Goal:** To successfully perform a visual inspection to check for the presence of external parasites.

**Description:** The student will perform a visual inspection for the presence of external parasites, including a visual inspection as well as the use of a flea comb and a white paper test.

**Criteria:** The student thoroughly inspected the animal from head to tail including ears, ventrum and perianal area, looking for the presence of external parasites – fleas, ticks, ear mites. **(critical)**

The student parted the hair on the animal in several places in order to directly observe the skin for evidence of external parasites or flea allergy dermatitis **(critical)**

The student examined the ears for evidence of external parasites **(critical)**

The student properly used a flea comb on the hair of the animal

The student placed the material collected with the flea comb onto a moist white paper towel to examine it for evidence of flea “dirt”. **(critical)**

The student **verbally stated all observations during the exam including how to differentiate between flea “dirt” and regular dirt debris even if no debris was present. (critical)**

**Number of Times Task Needs to Successfully Performed:** 4 total: 2 each dog and cat

**Materials Submitted for Evaluation and Verification:**

1. Task verification form for Perform Visual Inspection for External Parasites task, signed by the Clinical Mentorship supervisor.
2. A video that clearly shows the student performing a visual inspection for external parasites as defined in the above criteria for this task.

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

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

Date: \_\_\_\_\_ Species: \_\_\_\_\_

Date: \_\_\_\_\_ Species: \_\_\_\_\_

Date: \_\_\_\_\_ Species: \_\_\_\_\_

Date: \_\_\_\_\_ Species: \_\_\_\_\_

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

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

## 6.PERFORM AND READ DIRECT FECAL SMEAR

**Goal:** To successfully set up a direct fecal smear and examine the slide under the microscope for the presence of parasitic material.

**Description:** The student will take a very small amount of feces and mix it with a drop of saline or water on a microscope slide. The student will then place the slide on a microscope and examine it for parasitic material.

**Criteria:** The student placed a drop of saline on a microscope slide **(critical)**

The student added a tiny amount of feces to the slide **(critical)**

The student thoroughly mixed the feces and saline with an applicator stick or toothpick to form a homogenous emulsion that was sufficiently thin to see newspaper print through **(critical)**

The student placed a cover slip over the smear

The student placed the slide on a microscope and examined the area of the slide under the coverslip at 10X power, and noted and recorded any parasitic material found in the sample, verbally stating the result including at least Genus of organism if positive. 100x should be used if suspicious of Giardia or other protozoa. **(critical)**

**Number of Times Task Needs to be Successfully Performed:** 3 any species

### **Materials Submitted for Evaluation and Verification:**

1. Task Verification Form for Perform and Read Direct Fecal Smear skill, signed by the Clinical Mentorship supervisor.
2. A video that clearly shows the student performing and reading a direct smear as defined in the above criteria for this task.

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

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

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

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

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

## 7. PERFORM & READ FECAL FLOTATION

**Goal:** To successfully set up a **standing and centrifugal fecal flotation of the same fecal sample**. The student will interpret the test correctly and compare results by microscopic evaluation.

**Description:** The student will mix an appropriate amount of feces in fecal solution, perform a standing and centrifugal flotation of the same sample and read the slide and correctly interpret the results and compare techniques.

**Criteria:** Mix approx. 1-2 grams of feces with approx. 15-20 mL flotation solution in a Dixie cup or other container using a tongue blade. Stating what type of flotation solution was used. **(critical)**

The student mixed the feces into solution with an applicator stick (or equivalent) until no large fecal particles remained and strained it through a cheesecloth. **(critical)**

The student filled the tube even with the top or with slight reverse meniscus (convex)

The student applied a coverslip to top of tube and gently "seat" it with finger pressure **(critical)**

**Centrifugal:** The tube was carefully placed into centrifuge using a proper balance tube opposite (performing centrifugal sample) and spun at 1200-1500 rpm for minimum 5 minutes **(critical)**

**Standing:** When performing standing flotation the tube sat undisturbed in it's upright position for a minimum 10 minutes **(critical)**

Gently remove coverslip straight up and place on microscope slide. Examine for parasite eggs, etc. under 10X objective and protozoa and visualize egg details for identification under 40X. **(critical)**

Report what is found with Genus and species where applicable as rare, few, moderate, many. If no parasites are seen, report as "No Parasites Seen". **(critical)**

**Note: A swinging bucket centrifuge works best. But if you are using an angle head centrifuge, fill the tubes to within a centimeter of the top and spin them. Then place them in a rack, fill them to the top with flotation solution by gently running it down the inside edge, add a coverslip, let stand for ten minutes, and then read.**

<b>Number of Times Task Needs to be Successfully Performed:</b>	15 standing	6 dog
	<u>15 centrifuge</u>	6 cat
	Total: 30	3 other

**Note:** Of the 30 tests run, you will need to submit photo proof of 3 positive results. The positive results can be from any of the samples collected (dog, cat, or other). Examples of species that are 'other' include horse, cow, sheep, goat, pig, exotic (e.g. small mammal, reptile, bird). You do not need one positive result from each species listed, only 3 positive results total. The requirement is still to run a standing and a centrifugal fecal on the same sample for each patient you log.

### **Materials Submitted for Evaluation and Verification to Fulfill Submission Criteria:**

1. Task Verification Form for Perform & Read Fecal Flotation skill, signed by the Clinical Mentorship supervisor.
2. A video that clearly shows the student performing and reading a standing and centrifugal fecal flotation on the same sample comparing results as defined in the above criteria for this task.
3. **Submit three different images of positive results with correct identification including genus/species.**

## Fecal Flotation Log

### Standing Flotation

### Centrifugal Flotation

Species	Date	Results (Genus, species, & amt or NOPS)	Species	Date	Results (Genus, species, & amt or NOPS)
Dog #1			Dog #1		
Dog #2			Dog #2		
Dog #3			Dog #3		
Dog #4			Dog #4		
Dog #5			Dog #5		
Dog #6			Dog #6		
Cat #1			Cat #1		
Cat #2			Cat #2		
Cat #3			Cat #3		
Cat #4			Cat #4		
Cat #5			Cat #5		
Cat #6			Cat #6		
Other #1 <i>*indicate specific species*</i> Species:			Other #1 <i>*indicate specific species*</i> Species:		
Other #2 <i>*indicate specific species*</i> Species:			Other #2 <i>*indicate specific species*</i> Species:		
Other #3 <i>*indicate specific species*</i> Species:			Other #3 <i>*indicate specific species*</i> Species:		

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

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

RVT, CVT, LVT  
DVM, VMD

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

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

## 8. PERFORM & READ FECAL SEDIMENTATION

- Goal:** To successfully set up a fecal sedimentation and examine the slide under a microscope for the presence of parasitic material
- Description:** The student will mix a small amount of feces with saline or water, place the mixture into a centrifuge tube, pour off the liquid after centrifugation, and examine the sediment on a microscope slide under a microscope.
- Criteria:**
- The student placed about 1 teaspoon of feces into a paper cup and mixed with 15-20mL of saline or water **(critical)**
  - The student thoroughly mixed the feces into a homogenous mixture with an applicator stick or equivalent
  - The student poured the mixture through cheesecloth or gauze into a 15 ml centrifuge tube filling about <1cm from the top **(critical)**
  - The student placed the tube and appropriate balance in the centrifuge and spun the mixture for 5 minutes at 1200-1500 rpm **(critical)**
  - The student slowly poured the supernatant from the tube without disturbing the sediment layer on the bottom
  - The student used a pipette to transfer a small amount of the fine sediment to a microscope slide
  - The student placed the slide on a microscope and examined the area of the slide under the cover slip at 10x power. **(critical)**
  - Results verbally stated and recorded any parasitic material as no ova or parasites seen (NOPS) or with Genus and species of organism if positive. 40x power should be used to help visualize details for identification. **(critical)**

**Number of Times Task Needs to be Successfully Performed:** 3 any species

**Materials Submitted for Evaluation and Verification:**

1. Task verification form for Perform and Read a Fecal Sedimentation task, signed by the Clinical Mentorship supervisor.
2. A video that clearly shows the student performing and reading a fecal sedimentation as defined in the above criteria for this task.

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

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

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

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

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

## 9. FECAL EXAM PROJECT

This project is designed to help recognize the importance of client education and clinic procedures. The student will submit a written paper addressing the following:

1. The clinic's protocol for instructing clients how to obtain a stool sample from their pet and bring it to the clinic. **(critical)**
  - Describe changes that you would make in this instruction protocol, and why the changes should be made. **(critical)**
2. Does the mentorship site use fecal loops for collection of fecal samples? In what situations are they used? What alternative methods might be employed? Give advantages and disadvantages of using fecal loops. **(critical)**
3. It is just before closing, and a client calls who has just collected a stool sample and would like it to be checked for parasites. What instructions would you give this client? **(critical)**
4. Clinics current practices on fecals such as frequency, type of analysis (standing float or centrifugation), type of solution used and client education (does the veterinarian or veterinary nurse discuss recommendations with client) **(critical)**
  - Any recommendations on changes and why such as changes in frequency of performing fecal screenings or type of solution used and why you would use a different solution. **(critical)**
  - Did you see a difference in results with task #6 when comparing techniques? **(critical)**

The paper should be typed, and will be checked for grammar and spelling.