Veterinary Nursing Distance Learning

CLINICAL PATHOLOGY MENTORSHIP



VM 22700

CRITERIA HANDBOOK AND LOGBOOK

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NOTE THE FOLLOWING DUE DATES FOR THE TASKS ABOVE:

Fall and Spring Semester	11:59 pm EST Thursday of week 1 - Task 1
	11:59 pm EST Thursday of week 2 - Task 2
	11:59 pm EST Thursday of week 3 - Task 3
	11:59 pm EST Thursday of week 4 - Task 4
	11:59 pm EST Thursday of week 5 - Task 5
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11:59 pm EST Thursday of week 9 - Task 9 and 10
11:59 pm EST Thursday of week 10 - Task 11 and 12
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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.

All tasks may be submitted prior to due dates, and students are encouraged to do so. <u>However, Tasks</u> One and Two must be successfully completed before submitting any other tasks.

Animal Use Guidelines

Summer Semester

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.

STUDENT INFORMATION GOALS OF VM 22700 CLINICAL PATHOLOGY 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 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.

CONTACT PERSONS

Any questions regarding the VM 22700 Clinical Mentorship process should be directed to:

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

PRE-REQUISITES FOR VM 22700 CLINICAL PATHOLOGY CLINICAL MENTORSHIP

Contracts and Agreements

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

- 1. VM 22700 Clinical Mentorship and Facility Requirement Agreement
- 2. Clinical Mentorship Supervisor Agreement
- 3. Student Acknowledgement Form (If you are registering for multiple mentorships in a semester, you only need to complete this form once)
- 4. Professional Liability Insurance Coverage (You only need to complete this form once a year)

These forms are available on the VNDL website and can be completed electronically using DocuSign.

More than one Mentorship Supervisor may sign the mentorship logbook. Each must be either a DVM or a credentialed veterinary technician, and must complete a separate Clinical Mentorship Supervisor Agreement.

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 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 31st.

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

WHAT TO LOOK FOR IN A MENTORSHIP FACILITY

When evaluating a facility for clinical mentorships, the student should thoroughly research the site. It is strongly suggested to visit the site if not currently working there. This experience is a chance to begin to apply the wealth of knowledge and skills acquired and developed to this point in the veterinary nursing education. The following are points of discussion or questions to consider when evaluating the site (RVT includes any credentialed veterinary technician):

- i Does the site currently have credentialed veterinary technicians/nurses on staff?
- i Are there any boarded DVM specialists or VTS RVTs on staff?
- i What is the role of the technician/nurse versus other members of the staff (such as veterinary assistants)?
- ï What is the overall size of the staff (professional and paraprofessional staff)?
- i Is the site an accredited practice or facility (AAHA, ALAC, etc.)?
- ï Has the site hosted a VNDL student in the past?
- ï Does the staff seem receptive to hosting a student?
- i Is the site located in a safe and easily accessible location? Are there geographical considerations?
- ii Is this also an employment opportunity?
- i Ask the supervisor:
 - ï What are their specific goals for the student?
 - Have they ever been a supervisor before for a veterinary technician/nursing student?
 - ï Who else at the site may be involved in supervision?
 - To they have any concerns for the legal allowances in which the student may perform certain tasks?

It is strongly recommended that the student show potential mentorship supervisor(s) examples of mentorship logbooks, so they are aware of what the student will need to accomplish in this facility. The discussion should include that most tasks will require videos of the student performing skills, and how this will be accomplished. A student may have multiple supervisors (either DVM or credentialed technician), and one must be present any time the student is performing skills for a clinical mentorship. Supervisors sign Task Verification forms which state that they observed the student as they performed each task.

Mentorship supervisors act as coaches and must be present to ensure the safety of the patient and personnel. They are not involved in evaluation of skills; this is done by Purdue instructors.

Microscope Learning System (MLS)

This mentorship utilizes a web-based hematology lab application, Microscope Learning Systems (MLS) for the normal and abnormal differential tasks (Tasks 6 and 8).

MLS uses high-resolution images that are fully interactive and informative. Each slide duplicates the microscope experience with magnifications up to 100x. Practice tests as well as task assignments will be available through this application. There is no software to download; you can access the system anytime you have access to the Internet. The student is responsible for subscribing to the application for \$30, which is paid directly to MLS. More information on MLS and instructions on how to register will be provided to the student at the beginning of the semester on the course website.

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 VM 22700 Clinical Mentorship and Facility Requirement Agreement.

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

Microscope* and related supplies

- Binocular
- 10X oculars
- Objectives
 - o 10X (low power)
 - 40-50X (high dry power)
 - 100X (oil immersion)
- Mechanical stage
- Functional and properly aligned condenser and diaphragm
- Light source of at least 20 watts
- Immersion oil
- Lens paper
- · Lens cleaning solution

*NOTE: All parts of the microscope should be clean, functional, properly adjusted and aligned. We highly recommend, if the microscope has not been professionally serviced within the last six (6) months and/or is in a questionable state of repair, it be professionally serviced. Microscopes which are in a state of disrepair, out of adjustment, or dirty internally or externally will create difficulties for the student in providing accurate results.

Hematology Instruments and Supplies

- Automated hematology analyzer with appropriate supplies capable of providing:
 - Red blood cell counts
 - White blood cell counts + individual cell or composite differential
 - o Platelet counts
 - Hematocrit
 - Hemoglobin (may be stand-alone instrument or a function of the automated hematology or chemistry analyzer)

- Microhematocrit (PCV) centrifuge
- Microhematocrit (PCV) tubes, plain
- Microhematocrit tube clay sealant
- Microhematocrit reader
- Refractometer (with total protein and specific gravity scales)
- Frosted-end glass microscope slides
- Quick stain (ex. Diff-Quik®)
- EDTA blood collection tubes (appropriate for patient size)
- Laboratory wipes
- Small, plain test tubes
- Microscope slide mailers
- Hand tally (single-digit and/or multi-key differential counter) optional

Urinalysis

- Centrifuge appropriate for tubes and centrifuging urine
- Conical centrifuge tubes
- Urine chemistry test strips (minimum tests: pH, glucose, ketones, bilirubin, blood, protein)
- Frosted-end glass microscope slides
- Coverslips
- Stain (optional) NMB or Sedi (type) stain
- Disposable pipettes
- Refractometer (with total protein and specific gravity scales)
- Test tube rack

Clinical Chemistry

- Automated chemistry analyzer with appropriate supplies capable of providing:
 - o BUN, glucose, and common enzymes
- Serum blood collection tubes (appropriate for patient size)
- Anticoagulated blood collection tubes (appropriate for patient size)
- Centrifuge appropriate for the serum and plasma blood collection tubes
- Wooden applicator sticks

Serology

- Equipment, supplies and materials to perform the following tests:
 - o Saline Slide or Card agglutination

Crossmatch

- Commercially available <u>crossmatch</u> kit (ex. RapidVet®-H companion animal crossmatch or Alvedia crossmatch - must be a crossmatch kit, not a "blood type" kit) OR
- Simple crossmatch:
 - Minimum six 12 X 75mm (5mL) round-bottom disposable glass test tubes
 - Phosphate-buffered saline (PBS)
 - EDTA blood collection tubes
 - Plain, red-top tubes (Note: serum separator tubes are not appropriate for this procedure)
 - Centrifuge
 - Disposable pipettes
 - Wooden applicator sticks
 - Frosted-end glass microscope slides
 - Microscope (see previous requirements)
 - Thermostatically-controlled heating block or water bath

Coagulation

- Equipment, supplies and materials to perform **ONE** of the following tests:
 - Buccal bleeding time
 - Lancet
 - Timer
 - Filter or blotting paper
 - Roll gauze
 - Activated clotting time (ACT) (automated OR ACT tube test)
 - Automated ACT
 - OR
 - ACT test tubes
 - Thermostatically-controlled water bath or heating block
 - Timer
 - Automated Prothrombin time (PT)
 - Automated Activated Partial Thromboplastin Time (APTT)
 - Fibrinogen Assay (automated OR heat precipitation)
 - Automated fibrinogen and
 - OR
 - Thermostatically controlled heating block or water bath
 - Refractometer
 - Timer
 - Microhematocrit tube centrifuge
 - Microhematocrit tubes
 - Microhematocrit tube sealant

Cytology

- Exam gloves
- Sterile, 6" cotton-tip swabs
- Quick Stain (ex. Diff-Quik®)
- Frosted-end glass microscope slides
- Sterile saline
- Sterile vaginal speculum (appropriate size for the patient; can use sterile otoscope cone)
- Sterile lubricant
- Mild non-irritating soap for vaginal cytology patient prep (optional)
- Microscope slide mailers

Patient Requirements

It is essential that the student perform the designated tasks on the same sample, when specified, so that related values may be verified when the submission is evaluated.

- Hematology: one patient, any species
- · Clinical Chemistry: one patient, any species
- Urinalysis: one patient, any species
- Coagulation: appropriate patient for the test performed
- Crossmatch: one canine donor and one canine recipient
- Ear cytology: one patient, any species, with ear pathology. Do NOT use patients that have been treated in the past 48 hours with a topical ear medication
- Vaginal cytology: one female canine patient

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* that acknowledges that the supervisor has read and agreed to the *Mentorship Code of Conduct*. Multiple supervisors may be used for documentation of mentorship tasks. Each supervisor must complete a separate agreement.

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 VNDL office. These forms are available on the VNDL website and can be completed electronically using DocuSign.

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.
- 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 <u>different</u> 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 <u>you</u> actually performed the task as stated. Each evaluation states specifically what must be shown in the submitted materials.

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.

Note on photograph and/or slide submissions: The course instructor for this Clinical Mentorship has the option to request further documentation if the submitted materials do not clearly illustrate the required tasks.

You will be required to submit photographs of your microscopic fields for tasks 2, 4, 10, and 11. However, if the photographs are not sufficient to evaluate the completion of the task, you may be asked to submit the microscope slide. Therefore, it is essential that you prepare two (2) sets of slides for tasks 2, 4, 10, and 11. One set will be used by the student to report their findings and submit photographs. The second set will be reserved for submission to Purdue if required. Do **NOT** put immersion oil on the films that may be submitted to Purdue. Applying immersion oil to these films will negate our ability to evaluate the films and require the submission of new sets of films by the student.

Further instructions on how to take photographs of a microscopic field are provided on the course website.

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.

Videos, photographs, slides, written projects, the Criteria Handbook and Logbook and any other required documentation <u>will not be returned</u>. These items will be kept at Purdue as documentation of the student's performance for accreditation purposes.

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 <u>will</u> incur a grade penalty. Incomplete grades will not be assigned for mentorships at the end of each semester.

Feedback will be emailed to the student following review of each set of submitted tasks. 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.

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

<u>Task Verification forms</u> 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.

<u>Videos</u> 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.

<u>Using Kaltura for Video Assignments</u>

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 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 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 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 your last name and the task number. For example, "Phegley Task 2" or "Phegley Task 2 resubmission".
- 6. Submit all materials to Purdue by the deadlines listed in the logbooks.

1. VIDEO VERIFICATION OF REQUIRED EQUIPMENT AND SUPPLIES

Ensure that the student will have access to all equipment and supplies necessary to complete the

Goal:

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		
	The student walked through the facility's laboratory area(s) and showed • Microscope • Centrifuge • Show the centrifuge(s) that will be used for the tasks in microhematocrit centrifuge • Automated Hematology Analyzer • Automated Chemistry Analyzer	-	
Number of Tim	nes Task Needs to be Successfully Performed: 1		
Materials Subr	nitted for Evaluation and Verification:		
	 Task Verification Form for Video Verification of Required Equipment and Supplies, signed b the Clinical Mentorship supervisor. 		
	 One video showing the student as they introduced themselves and facility's laboratory area(s), showing the listed items clearly. The st live as they showed items. 		
Student Name	:		
Supervisor Na	me:	RVT, CVT, LVT DVM, VMD	
I verify that the	student will have access to the items shown, for tasks in this course.		
Signature of C	linical Mentorship Supervisor:		

2. MICROSCOPE USE, CARE, AND CLEANING

NOTE: This task must be completed and submitted for evaluation before beginning the remaining tasks. It is crucial that a functional and properly equipped microscope is available to the student for completion of the tasks in this mentorship.

Goal: To identify, demonstrate and explain the function of the parts of a microscope, and to clean it

properly.

Description: The student accurately identified, demonstrated, and explained the function of the parts of the

microscope and demonstrated the cleaning procedure.

Criteria: The student accurately identified and explained, using correct terminology, the function of the

following:

Make (manufacturer) and model of the microscope

Oculars, including power of each

- Focus adjustment ring (if so equipped)
- o Interpupillary distance adjustment device
- Nosepiece/Turret
- Objectives, including power
 - Scanning (if so equipped)
 - Low power
 - o High dry
 - Oil immersion
 - Other (specify)
- Fine and coarse focus adjustment knobs
- Stage, including mechanical stage adjustment device(s)
 - Left and right adjustment device
 - Forward and back adjustment device
- · Condenser, including
 - Vertical adjustment device
 - Horizontal control lever (iris diaphragm) adjustment device
- Field Diaphragm
 - o Iris adjustment lever (if so equipped)
- · On and off light switch
 - Rheostat control (if so equipped)
 - Location of light source (bulb)

The student demonstrated and described verbally the process of viewing a slide including adjustments of the microscope. The following must be included, in the proper order for the microscope used:

- Positioning of the slide on the stage
- Adjustment of the interpupillary device
- Adjustment of ocular focus ring (if so equipped)
- Positioning of each objective, lowest to highest power
- Positioning of the condenser, condenser (iris diaphragm) lever, light rheostat and field diaphragm in relation to each objective in use with this microscope
- Coarse and fine focus adjustment knobs

Starting at the oculars and ending at the light sources, the student cleaned the microscope so the field of view with each objective was debris-free.

- 1. Task verification form for microscope use, care, and cleaning signed by the clinical mentorship supervisor.
- 2. One video, narrated by the student, that clearly shows the parts of the microscope and the student identifying, describing the function, and describing the use, care and cleaning of the parts.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	
Signature of Clinical Mentorship Supervisor:	

3. URINALYSIS

Goal: To properly and accurately perform, read and record results of a urinalysis, including physical, chemical and microscopic observations

The student, using a properly collected fresh urine sample, will accurately perform, read and **Description:**

record findings for a urinalysis

Criteria: The student checked the calibration setting and cleanliness of the refractometer, identifying the scale and solution used to check calibration setting, and cleaned and/or adjusted if necessary

> The student verbally described the physical properties of the urine (color, clarity, volume, specific gravity with a refractometer, foam, odor) and reported results using proper units of measurement

The student verbally identified the manufacturer and brand of chemistry strips used and/or automated reader if used

The student followed the manufacturer's protocols for and described verbally the chemical properties of the urine and reported the results using proper units of measurement

The student prepared the urine for centrifugation

The student balanced the centrifuge with a balance tube or another patient tube and secured the centrifuge lid and cover

The student set and verbally identified the appropriate centrifugation time (and speed if applicable)

After the centrifuge stopped, the student removed the tube and prepared the urine for microscopic evaluation

The student evaluated the urine sediment slide under the microscope and verbally reported the results

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task verification form for urinalysis signed by the clinical mentorship supervisor.
- 2. One video showing the student performing the urinalysis procedures. The student should provide a narrative of the steps being performed during the video using correct medical terminology, including the urine sediment slide evaluation.
- 3. Completed written report of findings using the form on the following page.
- Labeled photograph (s) of microscopic fields that reflect sediment analysis findings.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	DVIVI, VIVID
Signature of Clinical Mentorship Supervisor:	

3. URINALYSIS WRITTEN REPORT

Species:	Breed:
Time of Collection:	Time of Testing:
Method of Collection:	Method of Preservation (circle one): None Refrigeration
Physical Evaluation	
Volume (mL):	
Color:	Sediment Analysis
Turbidity:	WBC/HPF:
Odor:	RBC/HPF:
Foam:	Epithelial cells/HPF:
Specific Gravity (Refractometer):	Sperm/HPF:
Chemistry Evaluation	Bacteria/HPF:
Glucose:	Casts (Specify Type)/LPF:
Bilirubin:	Crystals (Specify Type)/LPF:
Ketones:	Other cells (Specify):
Blood:	
pH:	
Protein:	
Urobilinogen:	
How well do the physical, chemical, and microsco explain.	opic observations coincide with each other? Describe and

4A. COMPLETE BLOOD COUNT MANUAL PACKED CELL VOLUME AND TOTAL PLASMA PROTEIN

Note: Task 3 is composed of two sub-tasks (a-b). Both sub-tasks must be performed simultaneously on a single sample collected from the same patient.

Goal: To accurately perform, read, and record the results of a packed cell volume and total plasma

protein.

Description: The student, using a sample of properly collected and mixed anticoagulated (EDTA) fresh

whole blood, will properly fill, seal and centrifuge a plain capillary tube and using a card or circular reader, accurately read and record the result as a percent (%) of packed red blood cells and

evaluate the plasma.

The student, using plasma from the capillary tube used to read the PCV, broke the tube, loaded the refractometer and accurately read the total protein value and recorded the result in g/dl.

Criteria: Packed Cell Volume

The student mixed, by 6-8 gentle inversions, a properly collected and anticoagulated (EDTA) tube of fresh, clot-free whole blood

The student filled a plain capillary tube 2/3 to 3/4 full, wiped the outside of the tube with a lab tissue, and sealed the end with sealing clay

The student placed the capillary tube into a slot in a microhematocrit tube centrifuge with the sealed end to the outside edge, noting the slot number

The student balanced the centrifuge with a balance tube or another patient tube

The student secured the centrifuge lid and cover

The student set and verbally identified the appropriate centrifugation time (and speed if applicable)

After the centrifuge stopped, the student removed the tube and recorded the appearance of the plasma and buffy coat, and visually guessed the PCV

Using a card reader, the student aligned the bottom of the red cell column with the zero line and the top of the plasma with the 100% line. The student read the PCV at the top of the red cell column and recorded the value as a percentage

Or using a circle reader, the student placed the capillary tube in the groove of the plastic indicator so the intersection of the clay sealant and the packed red blood cells lined up with the black line, located close to the center of the post of the reader

The student rotated the lower metal plate so the 100% line is directly beneath the red line on the plastic indicator

Keeping the lower metal plate in the same position and using the finger hole in the upper plate, the student rotated the upper plate so the black spiral line lined up at the top of the top of the plasma column

The student rotated both the upper and lower plates until the black spiral line lined up at the top of the red cell column. The student read the PCV from the scale directly beneath the red line on the plastic indicator and recorded the result as a %

Total Plasma Protein

Using the patient's tube from the PCV, the student scored the tube above the buffy coat with the edge of a triangular file or corner of a microscope slide and snapped the tube by placing finger pressure on each side of the scored line

Holding the refractometer horizontally and with the cover plate in position on the prism, the student placed a drop of plasma adjacent to the cover plate, insuring that there was no contamination from the buffy coat, other cellular components, or glass shards. The student may enhance plasma flow by tapping the end of the tube close to the cover plate or dispensing the plasma with an appropriate pipetting bulb or insulin syringe

The student held the refractometer to their eye with the prism toward the light, focused if necessary, read the total protein value and recorded the result in g/dl

The student cleaned the measuring prism and cover plate with water and dried them with a laboratory tissue

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

- 1. Task verification form for PCV and TPP signed by the clinical mentorship supervisor.
- 2. One video showing the student performing the PCV and TPP procedures. The student should provide a narrative of the steps being performed during the video.
- 3. Written evaluations (see below).

Appearance of Plasma (circle one); Clear, Cloudy, Lipemic, Hemolyzed, Icteric

	, , , , , , , , , , , , , , , , , , , ,	
Buffy Coat Color:		
Packed Cell Volume:	Total Plasma Prot	ein:
Date:		
Student Name:		
Supervisor Name:		RVT, CVT, LVT
verify that the student performed	d this task under my supervision.	DVM, VMD
Signature of Clinical Mentorshi	ip Supervisor:	

4B. COMPLETE BLOOD COUNT AUTOMATED HEMATOLOGY PANEL

Note: Task 3 is composed of two sub-tasks (a-b). Both sub-tasks must be performed simultaneously on a single sample collected from the same healthy patient.

To accurately perform, read and record the results of an in-house automated hematology Goal: panel/complete blood count The student, using a sample of properly collected and prepared whole blood, will accurately **Description:** perform, read and record an in-house automated hematology panel and complete blood count Criteria: The student identified the make (manufacturer) and model of the automated hematology analyzer The student described the quality control procedures for the analyzer The student followed the manufacturer's established protocol for the performance of an in-house automated hematology panel The student verbally commented on the results Number of Times Task Needs to be Successfully Performed: Materials Submitted for Evaluation and Verification: 1. Task verification form for automated hematology panel signed by the clinical mentorship supervisor. 2. One video showing the student performing the automated hematology panel procedure. The student should provide a narrative of the steps being performed during the video, including reporting the results. Date: Student Name: Supervisor Name: _____ RVT, CVT, LVT DVM, VMD I verify that the student performed this task under my supervision.

Signature of Clinical Mentorship Supervisor:

5. BLOOD FILM PREPARATION AND STAINING

Goal: To prepare and properly stain a quality blood film.

Description: The student, using either the handheld or tabletop wedge method, will prepare a quality blood film

from fresh EDTA anticoagulated blood, using a base slide. The student will properly stain the film

with quick stain so the cells and their components may be appropriately differentiated and

identified.

Criteria: The student properly mixed, by 6-8 gentle inversions, a properly collected and anticoagulated

(EDTA) tube of fresh, clot-free, whole blood

The student filled a capillary tube with blood from the tube and placed a drop of blood approximately 1cm from the frosted end, by touching the capillary tube to the base slide

For the handheld method, the student held the base slide between the thumb and index finger

For the tabletop method, the student held the base slide on the outer corner of the frosted end of the slide, with the frosted end toward their body

With the spreader slide held at a 30-45° angle, the student brought the spreader slide back into the drop of blood, allowed the blood to spread out along the edge of the spreader slide, and then moved the spreader slide forward in a rapid, even motion

The student produced a blood film 1/2 to 2/3 the length of the slide

The blood film was slightly narrower than the width of the slide

The feathered edge of the blood film was relatively straight across or slightly curved and did not end abruptly or have tail-like extensions

When viewed macroscopically, the blood film appeared to have a gradual transition from the thicker body to the feathered edge

The blood film did not have pressure ridges, holes, scratches, streaks or ridges within the smear

The student allowed the blood film to air dry vertically, with frosted end up

The student stained the film with fresh quick stain, dipping the slide for approximately ten, onesecond dips in the fixative, then the eosin (red) then the thiazine (blue) stains

The student held the slide vertically by the frosted end and rinsed the back of the slide with water

The student allowed the blood film to air dry vertically with the frosted end up

The student labeled the slide on the frosted end with patient ID, species, specimen type and date

1

Number of Times Task Needs to be Successfully Performed:

- 1. Task verification form for blood film preparation signed by the clinical mentorship supervisor.
- 2. One video showing the preparation, staining, and labeling of a blood film. The student should provide a narrative of the steps being performed during the video.
- 3. Labeled photograph of properly stained and labeled blood film.
- 4. Labeled photograph of a microscopic field within the monolayer where you would perform a differential count.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	
Signature of Clinical Mentorship Supervisor:	

6. NORMAL DIFFERENTIAL COUNT- MLS CASE

Goal: To accurately classify and count the different types of white blood cells and evaluate the morphologic features of the red blood cells, white blood cells, and platelets.

Description: Utilizing a case provided by MLS, the student will count and classify 100 white blood cells.

Additionally, the student will evaluate and report the morphology of the red blood cells, white

blood cells and platelets and perform a white blood cell and platelet estimate.

Criteria: The student reported the presence of any significant large objects (debris, microfilaria, platelet

clumps, white blood cell aggregates, etc.)

The student performed and reported a WBC estimate

The student observed, classified and counted 100 WBCs using correct units of measurement, reported the relative (%) and absolute (cells/microliter) value for each cell classification

The student evaluated and reported the morphology of the RBCs, WBCs and platelets based on the criteria in Appendix A and B in Regan et al: *Veterinary Hematology Atlas*

1

The student performed and reported a platelet estimate

The student counted and reported the number of nucleated RBC/100 WBC (if applicable)

Number of Times Task Needs to be Successfully Performed:

- 1. Task verification form for normal differential count signed by the clinical mentorship supervisor.
- 2. Completed written report of findings from MLS "test" using the form on the following page, using proper medical terminology and units of measurement.
- 3. Submission of assigned "test" in MLS. Students must earn a 75% minimum on the test to pass the task. If a student does not pass the test, the instructor must be notified. The student will need to retake the test and submit a revised written report based on the new results.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	DVIVI, VIVID
Signature of Clinical Mentorship Supervisor:	

6. NORMAL DIFFERENTIAL COUNT WRITTEN REPORT

Patient ID:	
RBC Morphology:	
Size	
Shape	
Color	
WBC and Platelet Morphology (Specify):	
WBC Estimate: (Average # WBCs per 50x field x 3,000= approximate #	of WBCs/mm³) SHOW YOUR WORK!
Relative WBC Counts (%): (number (%) of each WBC type observed in 100 WBCs)
Band Neutrophils:	Monocytes:
Segmented Neutrophils:	Eosinophils:
Lymphocytes:	Basophils:
Lymphodytes	Nucleated RBC (metarubricyte):
Absolute WBC Counts: (% of WBC type x WBC estimate)	
Dec INc. (co.d.Tr	Monocytes:
Band Neutrophils:	Eosinophils:
Segmented Neutrophils:	Basophils:
Lymphocytes:	Nucleated RBC (metarubricyte):

6. NORMAL DIFFERENTIAL COUNT WRITTEN REPORT (PAGE 2)

Corrected WBC count for NRBCs (if applicable): SHOW YOUR WORK!

WBC estimate x 100

(# of NRBCs + 100 = corrected WBC count/mm³)

Platelet Estimate: <u>SHOW YOUR WORK!</u> (Average # platelets per 100x field X 20,000 = Estimated platelets/mm³⁾

7A. PREPARE SERUM AND PLASMA

BEFORE YOU BEGIN!

Task 7 is composed of three sub-tasks (a-c). All three sub-tasks must be performed simultaneously on a single sample collected from the same patient.

Goal: To collect and prepare a quality serum and plasma blood sample.

Description: The student, using a serum collection tube (plain, red-top, or serum separator) AND an

anticoagulated collection tube (EDTA or lithium heparin) will properly collect and prepare a serum

and plasma blood sample, with the goal to be free of hemolysis and lipemia.

Criteria: The student selected the appropriate vacuum collection tubes and the needle holder and needle

or appropriate syringe and needle required to properly fill the vacuum containers for the

procedure, species, and size of the patient.

The student, without injury to the patient, selected an appropriate blood vessel for the collection

of venous blood and collected the sample.

Based on the manufacturer's stated capacity of the vacuum collection tube, the student properly filled one serum (plain, red top, or serum separator) tube and one anticoagulated (EDTA or lithium heparin) tube. The student filled the tubes to not less than 90% or more than 100% of the capacity stated for use. Each tube must be shown on the video with the label on the tube facing away from the camera so the level may be evaluated. The student will state verbally the manufacturer's stated fill capacity.

The student mixed, by inversion, only the appropriate tubes

The student allowed serum collection tube to adequately clot prior to centrifugation, noting the time for the clot to fully form

The student placed the serum collection tube <u>AND</u> the plasma collection tube in the centrifuge, properly balanced the centrifuge, and secured the centrifuge lid/cover (the student may need to centrifuge the serum and plasma tubes separately, depending on the equipment available)

The student set and verbally identified the appropriate centrifugation time (and speed if applicable)

After the centrifuge stopped, the student removed the serum collection tube <u>AND</u> the plasma collection tube, stating the amount and condition of the serum and plasma. *Each tube must be shown on the video with the label on the tube facing away from the camera so the amount and condition can be evaluated.*

Number of Times Task Needs to be Successfully Performed: 1 of each tube (serum and plasma)

- 1. Task verification form for collecting and preparing serum and plasma signed by the clinical mentorship supervisor.
- 2. One video showing the student performing the collection and preparation of serum and plasma, clearly showing the tubes after collection and after centrifugation. The student should provide a narrative of the steps being performed during the video.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	D VIVI, VIVID
Signature of Clinical Mentorship Supervisor:	

7B. CHEMISTRY PANEL

Note: Task 7 is composed of three sub-tasks (a-c). All three sub-tasks must be performed simultaneously on a single sample collected from the same patient. Goal: To accurately perform, read and record the results of a chemistry panel (BUN, glucose, common enzymes) **Description:** The student, using a sample of properly collected and prepared serum or plasma, will accurately perform, read, and record an in-house automated chemistry panel Criteria: The student identified the make (manufacturer) and model of the automated chemistry analyzer The student described the quality control procedures for the analyzer The student followed the manufacturer's established protocol for the performance of in-house chemistry testing The student verbally commented on the results Number of Times Task Needs to be Successfully Performed: 1 Materials Submitted for Evaluation and Verification: 1. Task verification form for chemistry panel signed by the clinical mentorship supervisor. 2. One video showing the student performing the in-house chemistry test. The student should provide a narrative of the steps being performed during the video, including reporting the results. Date: _____ Student Name: _____ Supervisor Name: RVT, CVT, LVT DVM, VMD

I verify that the student performed this task under my supervision.

Signature of Clinical Mentorship Supervisor:

7C. SEROLOGY

Note: Task 7 is composed of three sub-tasks (a-c). All three sub- tasks must be performed simultaneously on a single sample collected from the same patient.

Goal: To accurately perform, read, and report results of a saline slide/card agglutination serology test.

Description: The student, using a properly collected and prepared sample, described and accurately

performed, read, and reported the results of a saline slide/card agglutination serology test.

Criteria: The student demonstrated and described verbally on video, the entirety of the procedure and

accurately reported the results, including proper units of measurement

If a saline slide agglutination serology test was performed, the student evaluated the slide under

the microscope and verbally reported the results

If a card agglutination serology test was performed, the student followed the manufacturer's

established protocol for performance of the test

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task verification form for serology signed by the clinical mentorship supervisor.
- 2. One video showing the student performing the saline slide/card agglutination test. The student should provide a narrative of the steps being performed during the video.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	DVINI, VIVID
Signature of Clinical Mentorship Supervisor:	

8. ABNORMAL DIFFERENTIAL COUNT- MLS CASE

Goal:		properly and accurately perform and record results of an abvided by MLS.	abnormal differential count on a case
Description:	The student, using a case provided by MLS, will perform and report results for an abnormal differential count as described in task 6 of this course		
Criteria:	The student performed a differential count as described in task 6		
	Th	e student accurately reported the results of the count	
Number of Ti	mes	Task Needs to be Successfully Performed: 1	
Materials Sub	mitte	ed for Evaluation and Verification:	
	 Task verification form for abnormal differential, signed by the clinical mentorship supervisor. Completed written report of findings from MLS "test" using the form on the following page, using proper medical terminology and units of measurement. Submission of assigned "test" in MLS. Students must earn a 75% minimum on the test to pass the task. If a student does not pass the test, the instructor must be notified. The student will need to retake the test and submit a revised written report based on the new results. 		
Date:			
Student Name	e:		_
Supervisor Name:		:	
I verify that the	stuc	dent performed this task under my supervision.	DVM, VMD
Signature of (Clinic	cal Mentorship Supervisor:	

8. ABNORMAL DIFFERENTIAL COUNT- MLS CASE WRITTEN REPORT

Patient ID #	
RBC Morphology:	
Size	
Shape	
Color-	
WBC and Platelet Morphology (Specify):	
WBC Estimate: SHOW YOUR WORK! (Average # WBCs per 50x field x 3,000= approximate #	of WBCs/mm³)
Relative WBC Counts (%): (number (%) of each WBC type observed in 100 WBCs))
Band Neutrophils:	Monocytes:
Segmented Neutrophils:	Eosinophils:
Lymphocytes:	Basophils:
	Nucleated RBC (metarubricyte):
Absolute WBC Counts: (% of WBC type x WBC estimate)	
Dan d Navitaankila	Monocytes:
Band Neutrophils:	Eosinophils:
Segmented Neutrophils:	Basophils:
	Nucleated RBC (metarubricyte):

8. ABNORMAL DIFFERENTIAL COUNT – MLS CASE WRITTEN REPORT PG 2

Corrected WBC count for NRBCs (if applicable): SHOW YOUR WORK!

WBC estimate x 100 (# of NRBCs + 100 = corrected WBC count/mm³)

Platelet Estimate: SHOW YOUR WORK!

(Average # platelets per 100x field X 20,000 = Estimated platelets/mm³⁾

9. COAGULATION

To accurately perform and record results of an in-house coagulation test.

Goal:

Description:	The student accurately performed an in-house coagulation test and read and recorded the results	
•	, ·	
Criteria:	The student selected an in-house coagulation test from the following: buccal bleeding time, activated clotting time (ACT tube or automated), prothrombin time (PT), activated partial prothrombin time (APTT), fibrinogen assay (automated or heat precipitation), or other test approved by instructor	
	The student explained the rationale for the procedure	
	The student identified and described the quality control program for each procedure (if applicable)	
The student demonstrated and described verbally on video, the entirety of the procedure and accurately reported the results, including proper units of measurement		
Number of Times Task Needs to be Successfully Performed: 1		
Materials Submitted for Evaluation and Verification:		
	 Task verification form for coagulation signed by the clinical mentorship supervisor. One video showing the student performing the coagulation test. The student should provide a narrative of the steps being performed during the video, including the equipment and supplies needed for each test. 	
Date:		
Student Name	:	
Supervisor Na	me: RVT, CVT, LVT DVM, VMD	
I verify that the student performed this task under my supervision.		

Signature of Clinical Mentorship Supervisor:

10. CROSSMATCH

Goal:	To accurately collect blood samples for and perform crossmatch procedure	
Description:	The student, using collected samples from a potential blood do performed a crossmatch, using either the traditional method or compatibility for a possible blood transfusion, and correctly rep commercial test kit, make sure you are using a crossmatch	a commercial test kit, to determine orted the findings. If using a
Criteria:	The student demonstrated and described proper processing of procedure including identifying the donor and recipient sample condition of the sample (NSF, hemolyzed, lipemic) prior to test	s as plasma or serum and the
	The student demonstrated and described verbally on video, the accurately reported the result of the crossmatch test, using proof measurement	
Number of Tim	nes Task Needs to be Successfully Performed: 1	
Materials Subr	nitted for Evaluation and Verification:	
	 Task verification form for crossmatch signed by the clinical mentorship supervisor. One video showing the student performing the crossmatch procedure. The student should provide a narrative of the steps being performed during the video, including the equipment and supplies needed for the test. 	
Date:		
Student Name	:	
Supervisor Name:		RVT, CVT, LVT
DVM, VMD I verify that the student performed this task under my supervision.		

Signature of Clinical Mentorship Supervisor:

11. CANINE VAGINAL CYTOLOGY

* This task may be performed on an anesthetized patient*

Goal: To properly collect, process and accurately evaluate and report the cellular findings for canine

vaginal cytology.

Description: The student properly collected a sample for vaginal cytology and properly processed, accurately

stained, and read and recorded the results.

Criteria: The student had an assistant hold the dog in either sternal or standing recumbency.

The dog was held firmly to minimize movement prior to sampling.

The student properly placed a lubricated speculum into the vagina.

The student moistened a sterile cotton swab with sterile saline.

The student collected the sample without contaminating the sample/swab or causing injury to the patient

The student rolled the swab across the slide to distribute the cells along the slide.

The student stained the slide with Diff- Quick.

The student evaluated the stained slide under the microscope and verbally reported the results.

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task verification form for vaginal cytology signed by the clinical mentorship supervisor.
- 2. One video showing the student performing and describing the cytology process (collection, preparation, reading and reporting). The student should provide a narrative of the steps being performed during the video, including the microscopic evaluation.
- 3. Completed written report of findings using the form on the following page.
- 4. Labeled photographs of microscopic fields that reflect written report findings.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	DVIVI, VIVID
Signature of Clinical Mentorship Supervisor:	

11. CANINE VAGINAL CYTOLOGY WRITTEN REPORT

Appearance of labia and behavior of patient (describe):	
Appearance of discharge (color, consistency, odor):	
Microscopic evaluation (avg. # / HPF)	
Basal:	Intermediate:
Parabasal:	Superficial:
Foam:	Bacteria (specify Rods or Cocci):
Metestral:	Mucus:
RBC:	Debris:
WBC (specify):	Other/Abnormal Cells (Specify/describe):

12. EAR CYTOLOGY

Patient must be pathologic. Do NOT use patients that have been treated in the past 48 hours with a topical ear medication.

Goal: To properly collect, process, and accurately evaluate and report the cellular findings for ear

cytology.

Description: The student properly collected a sample, and properly processed, accurately stained, and read

and recorded the results for ear cytology.

Criteria: The student properly placed a cotton swab into the ear.

The swab containing the appropriate sample was removed from the ear.

The student rolled the swab across the slide.

The student stained the slide with Diff- Quick.

Using proper medical terminology and units of measurement, the student evaluated the stained slide under the microscope and verbally reported the results.

Number of Times Task Needs to be Successfully Performed: 1

- 1. Task verification form for ear cytology signed by the clinical mentorship supervisor.
- 2. One video showing the student performing and describing the cytology process (collection, preparation, reading and reporting). The student should provide a narrative of the steps being performed during the video, including the microscopic evaluation.
- 3. Completed written report of findings using the form on the following page.
- 4. Labeled photographs of microscopic fields that reflect written report findings.

Date:	
Student Name:	
Supervisor Name:	RVT, CVT, LVT DVM, VMD
I verify that the student performed this task under my supervision.	DVIVI, VIVID
Signature of Clinical Mentorship Supervisor:	

12. EAR CYTOLOGY WRITTEN REPORT

RIGHT EAR Appearance of Ear (Describe):	LEFT EAR Appearance of Ear (Describe):
	- (Besonibe).
Appearance of Exudate (Color, Odor):	Appearance of Exudate (Color, Odor):
Microscopic Evaluation (avg. #/OIF) RBC:	Microscopic Evaluation (avg. #/OIF) RBC:
WBC:	WBC:
Epithetical Cells:	Epithetical Cells:
Yeast:	Yeast:
Bacteria (Rods):	Bacteria (Rods):
Bacteria (Cocci):	Bacteria (Cocci):
Parasites:	Parasites:
Abnormal Cells (#/OIF and describe):	Abnormal Cells (#/OIF and describe):
Other (Specify):	Other (Specify):