

SMALL ANIMAL ANESTHESIA MENTORSHIP



VM 21000

CRITERIA HANDBOOK AND
LOGBOOK

Index of Notebook

Student Information

- Goals of Clinical Mentorship
- Contact person at Purdue University
- Pre-requisites for Clinical Mentorship
 - ❖ Contracts and agreements
 - ❖ Insurance
- Selection of Clinical Mentorship site – facility criteria
- Selection of Mentorship Supervisor
- Criteria Handbook and Logbook
- Completion of Clinical Mentorship

Clinical Mentorship Tasks

1. Video verification of required equipment and supplies
2. Obtain history prior to anesthesia
3. Preanesthetic preparation of the anesthetic machine (canine)
4. Preparation of supplies prior to general inhalant anesthesia (canine)
5. Preanesthetic preparation of the patient for anesthesia (canine)*
6. Induction by injectable agent and intubation (canine)**
7. Maintenance and monitoring of general anesthesia (canine)**
8. Recovery (canine)*
9. Preanesthetic preparation of the anesthetic machine (feline)
10. Preparation of supplies prior to general inhalant anesthesia (feline)
11. Preanesthetic preparation of the patient for anesthesia (feline)*
12. Induction by injectable agent and intubation (feline)**
13. Maintenance and monitoring of general anesthesia (feline)**
14. Recovery (feline)*
15. Anesthesia record procedures (canine and feline)

Clinical Mentorship Projects

16. Completion of one non-routine case from induction to recovery

IMPORTANT! See following page for due dates for all tasks and Animal Use Guidelines

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 2-8 and 15 (canine)***
- 11:59p.m. Thursday of week 10 – Tasks 9-14 and 15 (feline)***
- 11:59p.m. Thursday of week 12 – Task 16***
- Summer session*** ***11:59 p.m. ET Thursday of week 1 – Task 1***
- 11:59p.m. Thursday of week 4 – Tasks 2-8 and 15 (canine)***
- 11:59p.m. Thursday of week 8 – Tasks 9-14 and 15 (feline)***
- 11:59p.m. Thursday of week 10 – Task 16***

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; grade penalties will be assessed for tasks that require resubmission.



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.

STUDENT INFORMATION

GOALS OF CLINICAL MENTORSHIP

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

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

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

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

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

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

Documentation of completed tasks is essential to validating the educational process and insuring that the performance of graduates of the Veterinary 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 PERSON

Questions regarding the overall Clinical Mentorship process should be directed to
Pam Phegley, BS, RVT
Clinical Mentorship Coordinator
(765) 496-6809
phegleyp@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 21000 SMALL ANIMAL ANESTHESIA CLINICAL MENTORSHIP

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

In order to achieve the goals for this Clinical Mentorship, the tasks must be performed to the level of competency as outlined by the criteria for each task. The 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 21000

PRE-REQUISITES FOR CLINICAL MENTORSHIP

Agreements

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

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

These documents are available on the VNDL website.

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

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

Failure to complete and submit the listed documents 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 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):

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

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:

- Anesthetic machine with an “out of circle” vaporizer
- Endotracheal tubes of various sizes with functioning cuffs
- Stylet for feline intubation (student should describe or show the stylet when cat is intubated)
- Rebreathing systems
- Non-rebreathing system
- Two rebreathing bags (1L-5L)(500 ml for Non Rebreathing system)
- Anesthetic/oxygen masks
- Scavenging system
- Clippers
- Stethoscope
- Esophageal stethoscope
- ECG monitor
- Pulse oximeter
- Capnometer or capnograph
- Laryngoscope
- Blood pressure monitoring device
- Heating pad or other heat source

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

- Isoflurane or Sevoflurane
- Oxygen
- Lidocaine injectable/spray or gel for feline intubation
- Intravenous fluids
- Premedications such as atropine, acepromazine, butorphanol, buprenorphine, morphine, hydromorphone, xylazine, dexmedetomidine (require at least atropine plus one opioid and either acepromazine or xylazine/dexmedetomidine)
- Induction agents: Propofol, Ketamine and Valium, Etomidate (require at least 2; Ketamine and Valium count as one agent)
- Emergency drugs – these will be defined in the project for emergency drugs

In addition, the following disposable items must be available:

- Roll gauze or equivalent for tying ET tube to jaw (not tape)
- IV catheters
- Syringes
- Needles
- Materials for aseptic prep of IV catheter site
- Tape
- Towels or blankets
- Fluid administration set
- Eye lubricant
- Sterile saline for catheter flush

- Anesthesia record (may use one provided or your own) Record must include the following:
 - Patient name
 - Date
 - Signalment
 - Weight
 - Procedure
 - Special precautions (if any) or patient conditions pertinent to anesthesia
 - TPR prior to premedication and preferably at rest (that morning)
 - Preanesthetic(s), induction agent(s) and any other agents administered in the pre or peri anesthetic period with the amount given and the time
 - Heart rate, respiratory rate and gas concentration recorded every five minutes in chart form
 - IV fluid amount every 15-30 minutes plus total at end of procedure
 - Temperature recorded every 15-30 minutes
 - Blood pressure reading recorded every five minutes
 - Pulse oximetry reading recorded every five minutes
 - ETCO2 reading recorded every five minutes
 - Post-operative pain medication (if given), agent and amount
 - Time of extubation
 - TPR post extubation
 - Synopsis of patient response to anesthesia and recovery notes

SELECTION OF CLINICAL MENTORSHIP SUPERVISOR

The Clinical Mentorship Supervisor is the person who will sign Task Verification forms that 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 MUST 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. The student is 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 performing the task to minimize required resubmissions. The components of each task are summarized:

Goal – Describes the ultimate outcome of the task the student will perform.

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

Criteria – Lists specific, observable, objective behaviors the student must demonstrate for each task. The 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. The student may not use the same animal to do all of the repetitions of a task. However, the same animal may be used to perform different tasks. In other words, one can't do three ear cleanings on the same animal, however, one may 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 the student 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 the student was 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 the student follows the evaluation and validation requirements.

Task Verification Forms – Each task has a form that must be completed and signed by the Clinical Mentorship Supervisor. A supervisor must observe every performance of a skill for a clinical mentorship.

Supplementary Materials – Logs, written materials, photographs, or other forms/documentation may be required for specific tasks. The “Materials to be Submitted for Evaluation” section outlines what is required to submit for each task.

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 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 for each task.
2. Make sure that all equipment and supplies needed to complete the task are available. Pay particular attention to the details of what needs to be documented and submitted.
3. Make sure to obtain appropriate permissions where necessary. Please inform the facility's owner/manager of 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 submitted for evaluation and validation at Purdue are identified as the student's submission.
5. Label all videos posted to Brightspace with the task number.
6. Submit materials 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 skills 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 included in the write up.
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.

*****IMPORTANT FOR THE VM 21000 MENTORSHIP*****

Video submission for this course will include two cases: one canine and one feline. Each case will be followed from preparation through recovery.

Obtaining a History task, including video, will be submitted for one of the cases.

Written anesthesia records will be submitted for both cases.

Video to be submitted includes the following:

DOG weighing over 15 pounds (6.8 kg)

- Pre-Anesthetic Preparation of the Anesthetic Machine (Rebreathing System)
- Preparation of Supplies Prior to General Inhalant Anesthesia
- Preanesthetic Preparation of the Patient
- Induction by Injectable Agent
- Intubation
- Maintenance and Monitoring (at least 15 minutes continuous video focusing on the student, not the procedure)
- Recovery

CAT weighing less than 15 pounds (6.8 kg)

- Preanesthetic Preparation of the Anesthetic Machine (Non-Rebreathing System)
- Preparation of Supplies Prior to General Inhalant Anesthesia
- Preanesthetic Preparation of the Patient
- Induction by Injectable Agent
- Intubation
- Maintenance and Monitoring (at least 15 minutes continuous video focusing on the student, not the procedure)
- Recovery

NOTE: Tasks are separated in the logbook for ease of evaluation as well as clarity for the student. In reality, each task will be part of one ongoing procedure. All criteria for each task must be shown clearly on the video submission. The student will narrate on the video, explaining what they are doing and why, as well as what they are seeing, hearing, feeling, etc. in their patient.

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

The student walked through the facility and showed the following clearly:

- Evidence that the anesthesia machine has been serviced as part of routine maintenance **(critical)**
 - The machine should have an inspection sticker for when it was serviced
- Rebreathing anesthetic circuit **(critical)**
- Non-rebreathing anesthetic circuit **(critical)**
- Esophageal stethoscope **(critical)**
- Electrocardiograph monitoring device **(critical)**
- Blood pressure monitoring device **(critical)**
- Pulse oximetry monitoring device **(critical)**
- End-tidal CO2 monitoring device (capnograph or capnometer) **(critical)**

Live Narration Required: No

Continuous (unedited) Video Required: No

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. OBTAIN A HISTORY PRIOR TO ANESTHESIA

Goal: To obtain complete and accurate information from a client by asking specific questions about the pet prior to the patient receiving general anesthesia

Description: The student will question a client about the past and current condition of the animal that is to receive general anesthesia and record the history on the attached History Sheet. As an alternative, the student may photocopy the recorded history from the clinical record if allowed to do so by the veterinarian. The Clinical Mentorship supervisor will verify the accuracy of the obtained history and observe the student performing the history to verify the criteria for this task.

Criteria: The student allowed the client to state the presenting problem or reason for visit before asking additional directed questions

The student asked the questions clearly and used terminology the client understood so that the client was able to answer the question accurately.

The student asked specific questions regarding the following:

- When the patient last had food and water
- Did the patient have access to other sources of food and water
- Has the patient ever received anesthetic agents before (either sedatives or general anesthetics)
- If so, how did the patient recover from them
- Any reactions to medications
- How has the patient been acting lately

The student asked a set of general health questions

The student maintained good communication skills:

- Good eye contact
- Non-verbal body language that encouraged the client to continue to speak
- Allowed the client to finish a statement without interrupting

The student asked questions in such a way that the question was not a leading question

When /if a client was unable to understand a question, the student was able to formulate a different way of asking the same question and obtaining the needed information

The student periodically repeated the information back to the client for confirmation that the student's interpretation of what the client said or meant is correct

The student was able to direct the history taking dialogue to obtain the information in a timely manner (i.e. didn't allow the conversation to wander too far from the goal of getting a complete and accurate history)

The student was able to establish a working rapport with the client. The student conducted the history interview in a courteous and professional manner

The student was able to gauge the amount of history needed based upon the critical status of the patient (e.g. if the case was an animal in critical status, only the pertinent history was obtained before emergency treatment was begun)

The student accurately recorded the history obtained from the client in sufficient detail to convey all the information needed by the veterinarian

Live Narration Required: Yes

Continuous (unedited) Video Required: Yes

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification form for the history taking prior to anesthesia skill, signed by Clinical Mentorship supervisor
2. Either the original written record of the history for each patient or a photocopy from the clinical record of the written history signed by both the student and the Clinical Mentorship supervisor
3. One video with a client animal (in-person or over the phone) in which the student elicits and records a history. The written history corresponding to the video must be signed by the student and Clinical Mentorship supervisor and submitted with the video.

***NOTE: This take cannot be simulated with a coworker or your mentor. It must be performed with an actual client. This take can be performed on either your canine or feline case.*

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

3. PRE-ANESTHETIC PREPARATION OF THE ANESTHETIC MACHINE (CANINE)

Goal: To prepare an anesthetic machine for use on a canine patient receiving inhalant anesthesia through a rebreathing system

Description: The student will prepare the anesthetic machine for use on a canine patient that is to receive inhalant anesthesia. This will be done prior to the case.

Criteria: The student checked the main oxygen source to verify there was enough oxygen to complete the procedure.

The student turned the oxygen on and verified the oxygen pressure gauge was working and the flow meter was functioning by turning on the flow meter temporarily to watch the ball move to the desired oxygen flow.

The student checked the soda lime canister to ensure the granules were fresh according to the practice standard operating procedure.

The student checked the vaporizer to make sure there was inhalant agent in the vaporizer and that it was at least half full and the dial moved smoothly.

The student attached the proper breathing system and breathing bag for the patient being anesthetized. **(critical)**

The student traced the flow from the oxygen source, through the machine, to the patient, from the patient and back to the scavenge system to ensure all connections were correctly assembled, narrating with *correct names for all parts of the machine*. **(critical)**

The student properly performed a low-pressure leak test to ensure all connections were secure and no leaking of gas would occur. **(critical)**

The student opened the pop-off valve to ensure it was not stuck or closed prior to anesthesia.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification form for the Pre-anesthetic Preparation of Anesthetic Machine skill, signed by Clinical Mentorship supervisor.
2. One video of the student setting up and checking the machine with the rebreathing system. The student will show close up views of the gauges during checking so the instructor can verify no leaks were present. The student should also provide a narrative of steps performed while videoing.
3. Written SOP for the clinic for sodalime maintenance.

PRE-ANESTHETIC PREPARATION OF THE ANESTHETIC MACHINE (CANINE)

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

4. PREPARATION OF SUPPLIES PRIOR TO GENERAL INHALANT ANESTHESIA (CANINE)

Goal: To prepare anesthetic supplies prior to general anesthesia.

Description: The student will prepare all supplies needed for general inhalant anesthesia to ensure that materials needed for induction and maintenance of anesthesia are available and ready.

Criteria: The student chose at least 2 endotracheal tubes of appropriate size for the patient to be anesthetized, checked the cuffs for leaks, and placed them at the induction area.

The student placed a piece of non-stretch gauze or equivalent near the endotracheal tubes for use in tying the tube. The piece was of adequate length to tie around the tube and the jaw.

The student placed a syringe near the endotracheal tubes for filling the cuff after intubation.

The student prepared for placement of an intravenous catheter of appropriate size for the patient being anesthetized.

The student provided ophthalmic lubricating ointment at or near the induction area to lubricate the eye after induction.

The student provided an oxygen mask near the induction area to provide oxygen or inhalant agent prior to intubation if needed.

The student had a stethoscope and other monitoring devices ready for use at the induction area and verified they were in working order.

The student prepared the monitors and anesthesia machine in the surgery room if the patient was to be moved after induction.

The student located and made others aware of the location of the emergency supplies in case they are needed during the procedure.

The student provided towels, blankets and other methods for keeping the patient warm at the anesthesia area.

The student set up intravenous fluids with an administration set at the induction area for use during anesthesia.

The student prepared the anesthesia record and placed it at the area for induction.

The student prepared the anesthesia induction agent for the canine case so it was ready to administer at time of induction.

The student calculated oxygen flow rate, IV fluid rate and induction agent prior to induction.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Preparation of Supplies Prior to General Inhalant Anesthesia skill, signed by Clinical Mentorship supervisor.
2. One video submission showing the student preparing the supplies for a canine case. The video should highlight the area that will be used for induction and clearly show all of the supplies mentioned in the criteria. A narrative should be provided while videoing. ***The video should clearly show checking the endotracheal tube cuffs.***
3. Written calculation of oxygen flow rate for this patient.
4. Written calculation of IV fluid rate for this patient.
5. Written calculation of induction agent(s) for this patient.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

5. PRE-ANESTHETIC PREPARATION OF THE PATIENT FOR ANESTHESIA (CANINE)

- Goal:** The student will evaluate the patient prior to administration of pre-anesthetic or induction agents to ensure the patient is prepared and in appropriate condition for anesthesia.
- Description:** The student will review the patient chart and pertinent lab work, perform a physical exam, and review the procedure to be performed prior to general anesthesia. This will also allow the student to prepare for potential emergencies or special patient considerations prior to general anesthesia.
- Criteria:** The student identified the patient's chart and reviewed it to ensure that the appropriate laboratory tests had been performed as defined by the practice standard operating procedure. **(critical)**
- The veterinarian was consulted regarding results prior to premedication or induction of general anesthesia. **(critical)**
- The student performed a physical exam (not just a TPR) prior to administering any anesthetic pre-medications. Any abnormalities were brought to the attention of the veterinarian. **(critical)**
- The student calculated the dosages of preanesthetic agents as prescribed by the veterinarian, and had the doses checked by the mentor prior to administration.
- The student administered the approved pre-medications to the patient at least 15-30 minutes prior to induction of general anesthesia.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Pre-anesthetic Preparation of the Patient for Anesthesia skill, signed by the Clinical Mentorship supervisor.
2. One video submission showing the student evaluating a canine patient as defined in the criteria. The student will also submit a copy of the anesthetic record for the patients being videoed. This record will include TPR, signalment, procedure and premedication agents with doses being administered. If laboratory tests were ordered, those results should accompany the anesthetic record.
3. Written calculation(s) of preanesthetic agents for this patient.
4. Facility SOP for laboratory tests prior anesthesia.
5. Facility SOP for pre-medication agent(s) for this patient.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

6. INDUCTION BY INJECTABLE AGENT AND INTUBATION (CANINE)

- Goal:** To induce anesthesia in a patient using an injectable anesthetic agent to facilitate intubation, and to intubate a dog without injury to the trachea or other oral structures, *using a laryngoscope*
- Description:** The student will use one of the approved induction agents to induce a state of general anesthesia facilitating intubation. The student will intubate a dog and verify correct placement of the endotracheal tube.
- Criteria:**
- The student checked the syringe to verify the amount drawn up in the syringe matched the calculations.
 - The student removed any air in the syringe.
 - The student flushed the patient's catheter to ensure its patency.
 - The student checked the work area one last time to make sure all materials were ready.
 - The student, with an assistant holding the patient, administered the induction agent according to practice standard protocol. **(critical)**
 - The student attempted to open the patient's mouth to determine if more induction agent was needed to intubate.
 - The student waited until the assistant opened the mouth and the dog did not resist opening of the mouth.
 - The student chose an appropriate endotracheal tube, and used the tube or the laryngoscope to push the tongue out to the side of the mouth so the assistant could grasp it with a gauze sponge and extend the tongue over the lower canine teeth. The assistant or student did not place their hands in the dog's mouth at any time.
 - The student visualized the opening of the trachea and placed the endotracheal tube in the trachea. **(critical)**
 - The student palpated the neck to verify that only one tubular structure existed and the endotracheal tube was properly placed in the trachea.
 - The student palpated at the thoracic inlet, moving the tube gently in and out, to verify that the tip of the endotracheal tube was not beyond the bifurcation.
 - The student attached the breathing tubes and turned on oxygen, and secured the endotracheal tube with a tie-in.
 - The student ventilated the patient to 20cm H₂O, listening for a leak around the cuff. If needed, the student inflated the cuff until no leak was heard when inflating the lungs to a pressure of 20cm H₂O. A small leak should be heard when inflating the lungs past 20cm H₂O. **(critical)**
 - The student turned on the anesthetic vaporizer.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Induction by Injectable Agent and Intubation (Canine) skill, signed by the Clinical Mentorship supervisor.
2. One video submission showing the student inducing anesthesia with an injectable agent, and intubating a dog, clearly demonstrating all the listed criteria.
3. The student will provide a narrative of the steps performed, including the induction agent and how it is being administered (speed, volume) as well as each step of intubation and checking placement.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

7. MAINTENANCE AND MONITORING OF GENERAL ANESTHESIA (CANINE)

Goal: The student will maintain a state of general anesthesia while monitoring the patient's vital signs, reflexes and overall depth of anesthesia **for a period of at least 30 minutes**. The student will keep parameters within normal limits for the particular breed/species, and minimize patient discomfort during the procedure.

Description: Following induction and intubation, the student will monitor anesthetic gas concentration and oxygen flow rate, patient vital signs and reflexes, and maintain those values within normal limits. The anesthetic episode should last at least 30 minutes.

Criteria: The student set the oxygen flow rate according to the patient's weight and requirement based on the breathing system.

The student adjusted the vaporizer setting based on the patient's response to the induction agent.

The student verified that the patient was breathing and recorded a heart rate before proceeding further to ensure the patient was stable following induction and intubation.

The student placed an esophageal stethoscope into the esophagus and secured it to the endotracheal tube (not mouth) in order to facilitate quick removal if an emergency arose. **(critical)**

The student attached the ECG, pulse oximeter, blood pressure monitor, and capnometer according to the practice standard operating procedure. **(critical)**

The student attached intravenous fluids to the catheter and set the rate for surgical maintenance as ordered by the veterinarian.

The student closed the pop off valve and manually squeezed the rebreathing bag every 1-2 minutes, regardless of the patient's respiratory rate, to 15-20 cm H₂O. **(critical)**

The student recorded values including heart rate, respiratory rate, SPO₂, blood pressure, ETCO₂, and anesthetic gas concentration on the anesthesia record every 5 minutes (every 15-30 minutes for temperature and IV fluids). **(critical)**

The student brought abnormal readings to the attention of the veterinarian.

The student checked the patient's reflexes (palpebral, pedal, jaw tone, eye position, depending on accessibility) to ensure the patient was neither too deep nor too light, and brought abnormal responses to the attention of the veterinarian. **(critical)**

The student observed the patient's respiratory function by observing the rebreathing bag to count rate and observing chest excursions to ensure adequate depth of each breath.

The student maintained the anesthetic gas concentration at the lowest level possible to achieve general anesthesia.

The student decreased the anesthetic concentration near the end of the procedure.

The student narrated throughout the procedure, explaining what they were doing and why, as well as patient parameter changes and adjustments to anesthesia. **(critical)**

Live Narration Required: Yes

Continuous (unedited) Video Required: Yes

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Maintenance and Monitoring of General Anesthesia skill, signed by the Clinical Mentorship supervisor.
2. One video of maintenance and monitoring of a dog. The video must show at least 15 minutes of uninterrupted video of what the student is doing (not the procedure). The student will provide a narrative of the steps performed, including anesthesia machine settings and changes during the procedure. Monitoring parameters will be addressed verbally (heart rate, respiratory rate, SPO2, blood pressure, ETCO2), whether they are in normal range, and adjustments in response to these values.
3. Clinic SOP for monitoring anesthetized patients.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

8. RECOVERY FROM GENERAL ANESTHESIA (CANINE)

- Goal:** The student will monitor the recovery of a patient from general anesthesia.
- Description:** The student will monitor the recovery of a patient from general anesthesia following an anesthetic episode that lasts **at least 30 minutes**. The patient will be closely monitored until extubation and will be periodically monitored until it is able to sit or stand unsupported.
- Criteria:**
- The student turned off the inhalant anesthetic gas and administered oxygen for a period of 2-5 minutes to scavenge waste gases prior to disconnecting the breathing circuit.
- The student inspected the oral cavity to insure it was free of secretions and/or objects that could impede respiration.
- The student maintained the patient's head in a normal position.
- The student deflated the endotracheal tube cuff and untied it from the patient to facilitate quick removal.
- The student removed the esophageal stethoscope and other monitoring devices prior to the patient awakening from general anesthesia.
- The student removed the endotracheal tube when the patient began to swallow (2-3 times) without stimulation. **(critical)**
- The student observed the patient following extubation for signs of respiratory distress and/or cyanosis, and informed the veterinarian if abnormalities were noted. If abnormalities were noted, the student administered oxygen while awaiting the arrival of the veterinarian.
- The student recorded heart rate, respiratory rate and temperature following extubation. Values were recorded **every 5 minutes for the first 15 minutes following extubation**. Abnormalities were brought to the attention of the veterinarian. **(critical)**
- The student used available means to elevate body temperature to normal. The student recorded the patient's temperature every 30 minutes to ensure the patient did not become overheated. Heating methods were discontinued once the patient's temperature reached 100 degrees Fahrenheit.
- The student placed the patient (if recumbent) in the opposite recumbency as it was during the procedure to assist in ventilating the previously "down" lung field.
- If indicated, IV fluids were continued and the rate and catheter site monitored.
- The patient was assessed and/or monitored for signs of pain using a validated veterinary pain scoring system. **(critical)**
- Analgesics administered as needed on the orders of a DVM and recorded in the patient record. The patient was monitored closely following administration of analgesic agents.
- The student recorded recovery parameters and notes at the bottom of the anesthetic record to become a part of the patient's permanent record.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Recovery from General Anesthesia skill, signed by the Clinical Mentorship supervisor.
2. One video of recovery of a canine case. The student will provide a narrative of steps performed and will verbally state what is seen, heard and felt as they continue to monitor the patient. From turning off anesthetic gas to extubation should be included, as well as 2-3 additional checks of the patient. The video may be stopped between checks after the patient is extubated.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

15. ANESTHESIA RECORD PROCEDURES (CANINE)

Goal: The student will record various parameters during general anesthesia on an anesthetic record. This is a legal document that will be a permanent part of the patient's record.

Description: The student will record various parameters outlined in the criteria during general anesthesia. This record will be part of the patient's permanent record.

Criteria: The anesthetic record included the following information:

- Patient name
- Date
- Signalment
- Weight
- Procedure
- Special precautions or patient conditions pertinent to anesthesia
- TPR prior to premedication (taken same day as procedure), preferably at rest
- Preanesthetic, induction agent and any other agents administered in the pre- or peri anesthetic period, including the dose given, and the time
- Heart rate, respiratory rate, and anesthetic gas concentration recorded every 5 minu on the anesthesia record
- SPO2, blood pressure, and ETCO2 recorded every 5 minutes on the anesthesia record
- Temperature recorded every 15-30 minutes
- IV fluid volume every 15-30 minutes plus total at end of procedure
- Notes pertaining to major anesthetic or surgical events
- Post-operative pain medication (if given) agent and amount
- Time of beginning and end of anesthesia, the procedure, and extubation.
- TPR – post extubation and every 5 minutes for 15 minutes or until normal
- Synopsis of patient recovery and overall anesthetic episode – notes at bottom of record

Black or blue ink was used, and the record was legible and able to be interpreted.

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

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Anesthesia Record Procedure skill, signed by the Clinical Mentorship supervisor.
2. Submit the written anesthesia record for the dog and the cat used in videos. The name of the patient will be announced on the video and should correspond to the anesthetic record.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

Purdue University VTH Anesthesia Record

Patient Label	Date:		Pre-op Diagnosis:				Page of																					
	Weight: kg		lbs		Pre-anesthetic Drug		Dose Admin.	Route	Time																			
	PCV	TP	MM				mg																					
	GLU	BUN	CRT				mg																					
	HR	RR	ASA		Pre-op Effect		none	slight	moderate	profound	adverse																	
	Temperature		1 2 3 4 5 E		Induction Drug		Dose Admin.	Route	Time																			
Record Reviewed By:		Procedure				mg																						
Anesthesiologist:		Relevant Clinical Data				mg																						
Surgeons:						mg																						
Anesthetist:						mg																						
Time	0	0	1	5	3	0	4	5	0	0	1	5	3	0	4	5	0	0	1	5	3	0	4	5	0	0	Tube Size: mm	
IV Sol.																									System		Agent	
Temperature:																									Rebreathing Q		Sevoflurane Q	
Agent																									Non-rebreathing Q		Isoflurane Q	
Anesthesia																									Mechanical Q		Halothane Q	
Anesth. Depth																									O2: L/min		Body Position	
light medium deep																									Q Lateral: Right Q Left Q		Q Sternal Q Dorsal	
Codes																									Q Head Up Q Head Down		Monitoring	
Begin End																									ECG Q Temp. Q ETCO2 Q		NIBP Q IBP Q SPO2 Q	
Spon. Resp S---S																									Total Anesth. Time:		Total Surgery Time:	
Rad. R---7																									Extubation Time:		Standing Time:	
Anesth. A---@																									Recovery Score:		Post-op Total Fluids	
Surg. O---																									Temp:		HR:	
Cont. Vent. C---C																									RR:		Regional Anesthesia:	
SPO2																												
HR •																												
RR o																												
ETCO2 Q																												
B.P. Sys v																												
B.P. Diast ^																												
B.P. Mean +																												
Blood Gas:	#1	#2	#3	#4	#5	REMARKS:																						
Time:																												
pH:																												
pCO2:																												
pO2:																												
HCO3:																												
tCO2:																												
BE:																												
O2 Sat:																												
Please check box: Q arterial Q venous																												

9. PRE-ANESTHETIC PREPARATION OF THE ANESTHETIC MACHINE (FELINE)

Goal: To prepare an anesthetic machine for use on a patient receiving inhalant anesthesia through a non-rebreathing system.

Description: The student will prepare the anesthetic machine for use on a feline patient that is to receive inhalant anesthesia following induction. This will be done prior to the case.

Criteria: The student checked the main oxygen source to verify there was enough oxygen to complete the procedure.

The student turned the oxygen on and verified the oxygen pressure gauge was working and the flow meter was functioning by turning on the flow meter temporarily to watch the ball move to the desired oxygen flow.

The student checked the vaporizer to make sure there was inhalant agent in the vaporizer and that it was at least half full and the dial moved smoothly.

The student attached the non-rebreathing system for the patient being anesthetized. **(critical)**

The student traced the flow from the oxygen source through the machine to the patient, from the patient and back to the scavenge system to ensure all connections were correctly assembled, narrating with correct names for all parts of the machine. **(critical)**

The student properly performed a low-pressure leak test to ensure all connections were secure and no leaking of gas would occur. **(critical)**

The student opened the pop-off valve to ensure it was not stuck or closed prior to anesthesia.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification form for the Pre-Anesthetic Preparation of Anesthetic Machine skill, signed by Clinical Mentorship supervisor.
2. One video of the student setting up and checking the machine with the non-rebreathing system. The student will show close up views of the bag during checking so the instructor can verify no leaks were present. The student should also provide a narrative of steps performed while videoing.

Student Name: _____

Supervisor Name: _____

RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

10. PREPARATION OF SUPPLIES PRIOR TO GENERAL INHALANT ANESTHESIA (FELINE)

Goal: To prepare anesthetic supplies prior to general anesthesia.

Description: The student will prepare all supplies needed for general inhalant anesthesia to ensure that materials needed for induction and maintenance of anesthesia are available and ready.

Criteria: The student chose at least 2 endotracheal tubes of appropriate size for the patient to be anesthetized, checked the cuffs for leaks, and placed them at the induction area.

The student prepared lidocaine spray/gel and a stylet to aid in intubation.

The student placed a piece of non-stretch gauze or equivalent near the endotracheal tubes for use in tying the tube. The piece was of adequate length to tie around the tube and the jaw.

The student placed a syringe near the endotracheal tubes for filling the cuff after intubation.

The student prepared for placement of an intravenous catheter of appropriate size for the patient being anesthetized.

The student provided ophthalmic lubricating ointment at or near the induction area to lubricate the eye after induction.

The student provided an oxygen mask near the induction area to provide oxygen or inhalant agent prior to intubation if needed.

The student had a stethoscope and other monitoring ready for use at the induction area and verified they were in working order.

The student prepared the monitors and anesthesia machine in the surgery room if the patient was to be moved after induction.

The student located and made others aware of the location of the emergency supplies in case they are needed during the procedure.

The student provided towels, blankets and other methods for keeping the patient warm at the anesthesia area.

The student set up intravenous fluids with an administration set at the induction area for use during anesthesia.

The student prepared the anesthesia record and placed it at the area for induction.

The student prepared the anesthesia induction agent for the canine case so it was ready to administer at time of induction.

The student calculated oxygen flow rate, IV fluid rate and induction agent prior to induction.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Preparation of Supplies Prior to General Inhalant Anesthesia skill, signed by Clinical Mentorship supervisor.
2. One video submission showing the student preparing the supplies for a canine case. The video should highlight the area that will be used for induction and clearly show all of the supplies mentioned in the criteria. A narrative should be provided while videoing. ***The video should clearly show checking the endotracheal tube cuffs.***
3. Written calculation of oxygen flow rate for this patient.
4. Written calculation of IV fluid rate for this patient.
5. Written calculation of induction agent for this patient.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

11. PRE-ANESTHETIC PREPARATION OF THE PATIENT FOR ANESTHESIA (FELINE)

- Goal:** The student will evaluate the patient prior to administration of pre-anesthetic or induction agents to ensure the patient is prepared and in appropriate condition for anesthesia.
- Description:** The student will review the patient chart and pertinent lab work, perform a physical exam, and review the procedure to be performed prior to general anesthesia. This will also allow the student to prepare for potential emergencies or special patient considerations prior to general anesthesia.
- Criteria:** The student identified the patient's chart and reviewed it to ensure that the appropriate laboratory tests had been performed as defined by the practice standard operating procedure. **(critical)**
- The veterinarian was consulted regarding results prior to premedication or induction of general anesthesia. **(critical)**
- The student performed a physical exam (not just a TPR) prior to administering any anesthetic pre-medications. Any abnormalities were brought to the attention of the veterinarian. **(critical)**
- The student calculated the dosages of preanesthetic agents as prescribed by the veterinarian, and had the doses checked by the mentor prior to administration.
- The student administered the approved pre-medications to the patient at least 15-30 minutes prior to induction of general anesthesia.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Pre-anesthetic Preparation of the Patient for Anesthesia skill, signed by the Clinical Mentorship supervisor
2. One video submission showing the student evaluating a feline patient as defined in the criteria. The student will also submit a copy of the anesthetic record for the patients being videoed. This record will include TPR, signalment, procedure and premedication agents with doses being administered. If laboratory tests were ordered, those results should accompany the anesthetic record.
3. Facility SOP for pre-medication agent(s) for this patient.
4. Facility SOP for laboratory tests prior anesthesia.
5. Facility SOP for pre-medications.

Student Name: _____

Supervisor Name: _____

RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

12. INDUCTION BY INJECTABLE AGENT AND INTUBATION (FELINE)

- Goal:** To induce anesthesia in a patient using an injectable anesthetic agent to facilitate intubation, and to intubate a cat without injury to the trachea or other oral structures, *using a laryngoscope*
- Description:** The student will use one of the approved induction agents to induce a state of general anesthesia facilitating intubation. The student will intubate a cat and verify correct placement of the endotracheal tube.
- Criteria:**
- The student checked the syringe to verify the amount drawn up in the syringe matched the calculations.
 - The student removed any air in the syringe.
 - The student flushed the patient's catheter to ensure its patency.
 - The student checked the work area one last time to make sure all materials were ready.
 - The student, with an assistant holding the patient, administered the induction agent according to practice standard protocol. **(critical)**
 - The student attempted to open the patient's mouth to determine if more induction agent was needed to intubate.
 - The student waited until the assistant opened the mouth and the dog did not resist opening of the mouth.
 - The student chose an appropriate endotracheal tube, and used the tube or the laryngoscope to push the tongue out to the side of the mouth so the assistant could grasp it with a gauze sponge and extend the tongue over the lower canine teeth. The assistant or student did not place their hands in the dog's mouth at any time.
 - The student visualized the opening of the trachea and placed the endotracheal tube in the trachea. **(critical)**
 - The student palpated the neck to verify that only one tubular structure existed and the endotracheal tube was properly placed in the trachea.
 - The student palpated at the thoracic inlet, moving the tube gently in and out, to verify that the tip of the endotracheal tube was not beyond the bifurcation.
 - The student attached the breathing tubes and turned on oxygen, and secured the endotracheal tube with a tie-in.
 - The student ventilated the patient to 20cm H₂O, listening for a leak around the cuff. If needed, the student inflated the cuff until no leak was heard when inflating the lungs to a pressure of 20cm H₂O. A small leak should be heard when inflating the lungs past 20cm H₂O. **(critical)**
 - The student turned on the anesthetic vaporizer.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Induction by Injectable Agent and Intubation (Feline) skill, signed by the Clinical Mentorship supervisor.
2. One video submission showing the student inducing anesthesia with an injectable agent, and intubating a cat, clearly demonstrating all the listed criteria.
3. The student will provide a narrative of the steps performed, including the induction agent and how it is being administered (speed, volume) as well as each step of intubation and checking placement.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

13. MAINTENANCE AND MONITORING OF GENERAL ANESTHESIA (FELINE)

Goal: The student will maintain a state of general anesthesia while monitoring the patient's vital signs, reflexes and overall depth of anesthesia *for a period of at least 30 minutes*. The student will keep parameters within normal limits for the particular breed/species, and minimize patient discomfort during the procedure.

Description: Following induction and intubation, the student will monitor anesthetic gas concentration and oxygen flow rate, patient vital signs and reflexes, and maintain those values within normal limits. The anesthetic episode should last at least 30 minutes.

Criteria: The student set the oxygen flow rate according to the patient's weight and requirement based on the breathing system.

The student adjusted the vaporizer setting based on the patient's response to the induction agent.

The student verified that the patient was breathing and recorded a heart rate before proceeding further to ensure the patient was stable following induction and intubation.

The student placed an esophageal stethoscope into the esophagus and secured it to the endotracheal tube (not mouth) in order to facilitate quick removal if an emergency arose. **(critical)**

The student attached the ECG, pulse oximeter, blood pressure monitor, and capnometer according to the practice standard operating procedure. **(critical)**

The student attached intravenous fluids to the catheter and set the rate for surgical maintenance as ordered by the veterinarian.

The student closed the pop off valve and manually squeezed the rebreathing bag every 1-2 minutes, regardless of the patient's respiratory rate, to 15-20 cm H₂O. **(critical)**

The student recorded values including heart rate, respiratory rate, SPO₂, blood pressure, ETCO₂, and anesthetic gas concentration on the anesthesia record every 5 minutes (every 15-30 minutes for temperature and IV fluids). **(critical)**

The student brought abnormal readings to the attention of the veterinarian.

The student checked the patient's reflexes (palpebral, pedal, jaw tone, eye position, depending on accessibility) to ensure the patient was neither too deep nor too light, and brought abnormal responses to the attention of the veterinarian. **(critical)**

The student observed the patient's respiratory function by observing the rebreathing bag to count rate and observing chest excursions to ensure adequate depth of each breath.

The student maintained the anesthetic gas concentration at the lowest level possible to achieve general anesthesia.

The student decreased the anesthetic concentration near the end of the procedure.

The student narrated throughout the procedure, explaining what they were doing and why, as well as patient parameter changes and adjustments to anesthesia. **(critical)**

Live Narration Required: Yes

Continuous (unedited) Video Required: Yes

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for the Maintenance and Monitoring of General Anesthesia skill, signed by the Clinical Mentorship supervisor.
2. One video of maintenance and monitoring of a cat. The video must show at least 15 minutes of uninterrupted video of what the student is doing (not the procedure). The student will provide a narrative of the steps performed, including anesthesia machine settings and changes during the procedure. Monitoring parameters will be addressed verbally (heart rate, respiratory rate, SPO2, blood pressure, ETCO2), whether they are in normal range, and adjustments in response to these values.
3. Clinic SOP for monitoring anesthetized patients.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

14. RECOVERY FROM GENERAL ANESTHESIA (FELINE)

- Goal:** The student will monitor the recovery of a patient from general anesthesia.
- Description:** The student will monitor the recovery of a patient from general anesthesia following an anesthetic episode that lasts **at least 30 minutes**. The patient will be closely monitored until extubation and will be periodically monitored until it is able to sit or stand unsupported.
- Criteria:** The student turned off the inhalant anesthetic gas and administered oxygen for a period of 2-5 minutes to scavenge waste gases prior to disconnecting the breathing circuit.
- The student inspected the oral cavity to ensure it was free of secretions and/or objects that could impede respiration.
- The student maintained the patient's head in a normal position.
- The student deflated the endotracheal tube cuff and untied it from the patient to facilitate quick removal.
- The student removed the esophageal stethoscope and other monitoring devices prior to the patient awakening from general anesthesia.
- The student removed the endotracheal tube when the patient began to swallow (2-3 times) without stimulation. **(critical)**
- The student observed the patient following extubation for signs of respiratory distress and/or cyanosis, and informed the veterinarian if abnormalities were noted. If abnormalities were noted, the student administered oxygen while awaiting the arrival of the veterinarian.
- The student recorded heart rate, respiratory rate and temperature following extubation. Values were recorded **every 5 minutes for the first 15 minutes following extubation**. Abnormalities were brought to the attention of the veterinarian. **(critical)**
- The student used available means to elevate body temperature to normal. The student recorded the patient's temperature every 30 minutes to ensure the patient did not become overheated. Heating methods were discontinued once the patient's temperature reached 100 degrees Fahrenheit.
- The student placed the patient (if recumbent) in the opposite recumbency as it was during the procedure to assist in ventilating the previously "down" lung field.
- If indicated, IV fluids were continued and the rate and catheter site monitored.
- The patient was assessed and/or monitored for signs of pain using a validated veterinary pain scoring system. **(critical)**
- Analgesics administered as needed on the orders of a DVM and recorded in the patient record. The patient was monitored closely following administration of analgesic agents.
- The student recorded recovery parameters and notes at the bottom of the anesthetic record to become a part of the patient's permanent record.

Live Narration Required: Yes

Continuous (unedited) Video Required: No

Number of Times Task Needs to be Successfully Performed: 1

Materials Submitted for Evaluation and Verification:

1. Task Verification Form for Recovery from General Anesthesia skill, signed by the Clinical Mentorship supervisor.
3. One video of recovery of a feline case. The student will provide a narrative of steps performed and will verbally state what is seen, heard and felt as they continue to monitor the patient. From turning off anesthetic gas to extubation should be included, as well as 2-3 additional checks of the patient. The video may be stopped between checks after the patient is extubated.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

15. ANESTHESIA RECORD PROCEDURES (FELINE)

Goal: The student will record various parameters during general anesthesia on an anesthetic record. This is a legal document that will be a permanent part of the patient's record.

Description: The student will record various parameters outlined in the criteria during general anesthesia. This record will be part of the patient's permanent record.

Criteria: The anesthetic record included the following information:

- Patient name
- Date
- Signalment
- Weight
- Procedure
- Special precautions or patient conditions pertinent to anesthesia
- TPR prior to premedication (taken same day as procedure), preferably at rest
- Preanesthetic, induction agent and any other agents administered in the pre- or peri anesthetic period, including the dose given, and the time
- Heart rate, respiratory rate, and anesthetic gas concentration recorded every 5 minu on the anesthesia record
- SPO2, blood pressure, and ETCO2 recorded every 5 minutes on the anesthesia record
- Temperature recorded every 15-30 minutes
- IV fluid volume every 15-30 minutes plus total at end of procedure
- Notes pertaining to major anesthetic or surgical events
- Post-operative pain medication (if given) agent and amount
- Time of beginning and end of anesthesia, the procedure, and extubation.
- TPR – post extubation and every 5 minutes for 15 minutes or until normal
- Synopsis of patient recovery and overall anesthetic episode – notes at bottom of record

Black or blue ink was used, and the record was legible and able to be interpreted.

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

Materials Submitted for Evaluation and Verification:

3. Task Verification Form for the Anesthesia Record Procedure skill, signed by the Clinical Mentorship supervisor.
4. Submit the written anesthesia record for the dog and the cat used in videos. The name of the patient will be announced on the video and should correspond to the anesthetic record.

Student Name: _____

Supervisor Name: _____ RVT, CVT, LVT
DVM, VMD

Patient Name: _____ **Date:** _____

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

Signature of Clinical Mentorship Supervisor: _____

Purdue University VTH Anesthesia Record

Patient Label	Date:		Pre-op Diagnosis:				Page of																					
	Weight: kg		lbs		Pre-anesthetic Drug		Dose Admin.	Route	Time																			
	PCV	TP	MM				mg																					
	GLU	BUN	CRT				mg																					
	HR	RR	ASA		Pre-op Effect		none	slight	moderate	profound	adverse																	
	Temperature		1 2 3 4 5 E		Induction Drug		Dose Admin.	Route	Time																			
							mg																					
							mg																					
							mg																					
	Record Reviewed By:		Procedure																									
Anesthesiologist:		Relevant Clinical Data																										
Surgeons:																												
Anesthetist:																												
Time	0	0	1	5	3	0	4	5	0	0	1	5	3	0	4	5	0	0	1	5	3	0	4	5	0	0	Tube Size: mm	
IV Sol.																									System		Agent	
Temperature:																									Rebreathing Q		Sevoflurane Q	
Agent																									Non-rebreathing Q		Isoflurane Q	
Anesthesia																									Mechanical Q		Halothane Q	
Anesth. Depth																									O2: L/min		Body Position	
light medium deep																									Q Lateral: Right Q Left Q		Q Sternal Q Dorsal	
Codes																									Q Head Up Q Head Down		Monitoring	
Begin End																									ECG Q Temp. Q ETCO2 Q		NIBP Q IBP Q SPO2 Q	
Spon. Resp S---S																									Total Anesth. Time:		Total Surgery Time:	
Rad. R---7																									Extubation Time:		Standing Time:	
Anesth. A---@																									Recovery Score:		Post-op Total Fluids	
Surg. O---																									Temp:		HR:	
Cont. Vent. C---C																									RR:		Regional Anesthesia:	
SPO2																												
HR •																												
RR o																												
ETCO2 Q																												
B.P. Sys v																												
B.P. Diast ^																												
B.P. Mean +																												
Blood Gas:	#1	#2	#3	#4	#5	REMARKS:																						
Time:																												
pH:																												
pCO2:																												
pO2:																												
HCO3:																												
tCO2:																												
BE:																												
O2 Sat:																												
Please check box: Q arterial Q venous																												

16. Completion of One Non-Routine Anesthetic Episode Project

The student will anesthetize a patient for a non-routine anesthetic episode that will span at least 30 minutes. The goal of this task is for the student to gain experience in anesthetizing a patient that is higher risk and would be more challenging to anesthetize. Contact the mentorship supervisor if you have any questions on the appropriateness of a certain case.

Examples would be:

- Geriatric dog or cat receiving a dental prophylaxis or surgical procedure.
- Brachycephalic breed (i.e. – Bulldog, Boston Terrier) undergoing anesthesia
- Dog or cat with kidney or liver disease undergoing a surgical procedure

The student must provide the following information, written in their own words:

- Signalment
- History and Physical exam findings
- Results of any additional testing done prior to anesthesia (hematology, etc.) This may be photocopied and attached
- Procedure to be performed and why patient is receiving this procedure. The student will also describe what aspects of the procedure may be particularly risky to the patient, and how the student will respond.
- Anesthetic plan (including drugs, monitoring and positioning) **(critical)**
 - ***You must be able to provide the clinical reasoning (rationale) for each drug chosen and why it was chosen for this specific patient.***
 - ***You must provide any monitoring concerns you have for this patient and why.***
- Synopsis of procedure (describe induction, maintenance and recovery) **(critical)**
- A copy of the anesthetic record **(critical)**
- ***Self-assessment of student performance, including aspects that went well/as planned, as well as aspects that need improvement or that the student would do differently, given another opportunity.***