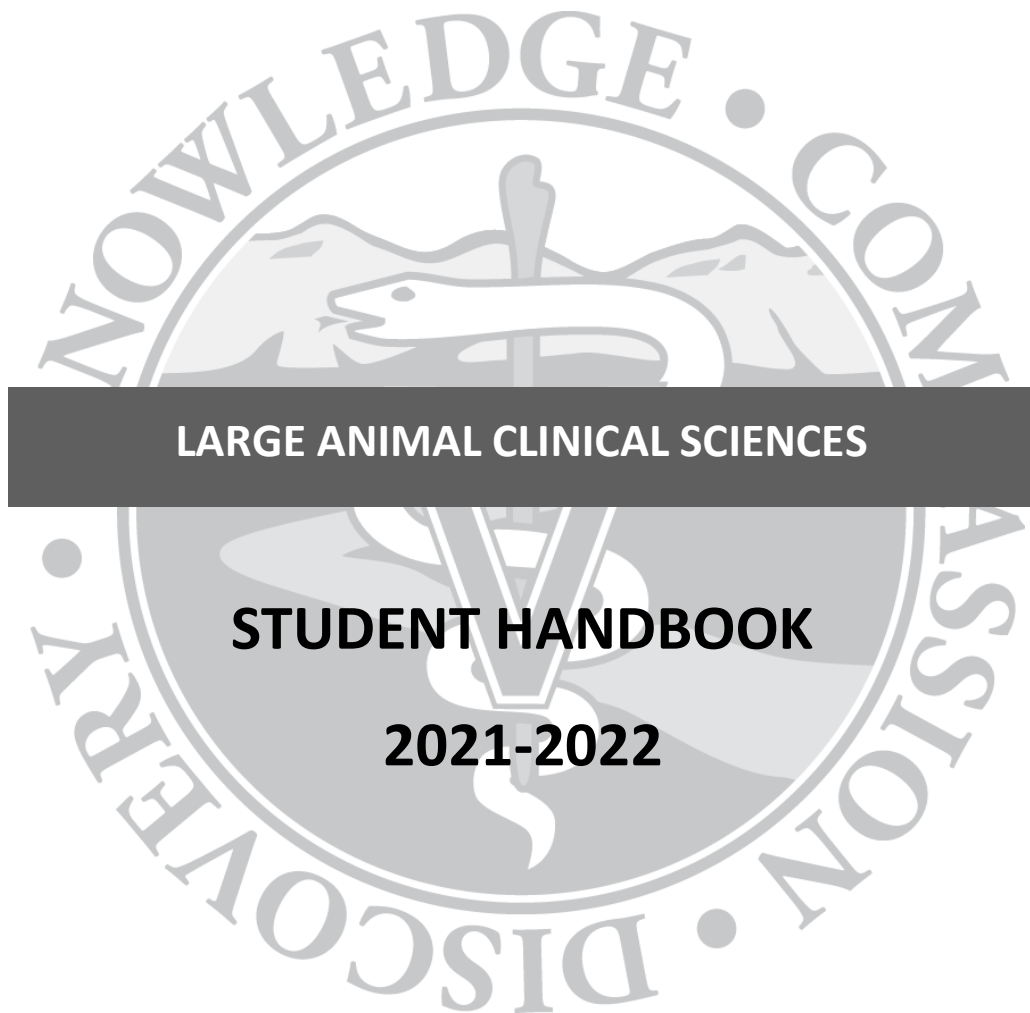


**UTCVM VETERINARY MEDICAL CENTER**



**LARGE ANIMAL CLINICAL SCIENCES**

**STUDENT HANDBOOK**

**2021-2022**

**UTCVM**  
INSTITUTE OF AGRICULTURE  
THE UNIVERSITY OF TENNESSEE

# **STUDENT HANDBOOK**

**2021-22**

## **THE UNIVERSITY OF TENNESSEE VETERINARY MEDICAL CENTER LARGE ANIMAL CLINICAL SCIENCES**

*"As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my personal commitment to honor and integrity."*

**Welcome Senior Students!**  
**University of Tennessee**  
**Veterinary Medical Center**  
**Large Animal 2021-22**

At last you have reached the final year of your DVM curriculum. It is now time to begin the practice of veterinary medicine. On a daily basis you will be practicing the application of your knowledge and problem solving skills to real clinical cases. Never before has your responsibility for your own education been greater. Now is the time to approach every case as if you were the primary clinician and solely accountable. While your thoughts are being formulated, the clinicians, who are ultimately responsible, will guide you every step of the way and will work with you to determine what actually will be implemented. This approach will give you the opportunity to make many correct decisions and also to make some errors, from which the patient will be protected as you learn. While you will be as actively involved in patient management as your preparation warrants and as the cases allow, no treatment will be instituted or procedures performed without the approval of your clinicians.

The learning curve in clinical rotations is steep for motivated students. Take every opportunity to find out what cases are scheduled to come in and then read about the problem in advance. Sometimes the caseload and patient needs are great enough to prevent in-depth discussions at the time the case is being managed. A well-read student will glean more from these cases and the demonstration of knowledge may even result in greater involvement.

Never hesitate to ask a question. The only senseless question is the one not asked. If you already knew the answers, you would not need this final year. You will be surrounded by terrific resources of knowledge, so take every advantage while you have the chance.

We are very proud of the Large Animal Veterinary Teaching Hospital. We try tirelessly to provide the highest quality of patient care, to support our referring veterinarians, and to serve the animal owning public of Tennessee and surrounding states. Part of the reason we strive for excellence is to ensure an adequate teaching load for you. As such, we ask you to treat this hospital operation impeccably as if it were your own.

We are constantly striving to improve and we all welcome your constructive comments on how we can do so. In closing, we in LACS have four major messages for you:

1. OUR FACULTY MEMBERS HAVE IDENTIFIED TEACHING AS OUR NUMBER ONE MISSION. YOU AND YOUR EDUCATION ARE IMPORTANT TO US.
2. YOU HAVE A SIGNIFICANT RESPONSIBILITY FOR YOUR OWN EDUCATION, AND YOU WILL GET AS MUCH OUT OF YOUR CLINICAL ROTATIONS AS YOU PUT INTO THEM. WE WILL BE YOUR COACHES AS YOU EMBARK UPON THE PROCESS OF LIFE-LONG LEARNING.
3. WHILE IN LACS, YOU WILL BE AN IMPORTANT PART OF THE TEAM WHICH PLACES THE HIGHEST PRIORITY ON METICULOUS PATIENT CARE.
4. YOU WILL CONTRIBUTE TO OUR SUCCESS IN SERVING VETERINARIANS AND ANIMAL OWNERS.

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**Veterinary Medical Center**  
**Large Animal Clinical Sciences**

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**Large Animal Clinical Sciences Safety Procedures**

\*\*This is now a separate document and can be accessed via VetNet in the same location as the Student Handbooks

**UNIVERSITY OF TENNESSEE VETERINARY MEDICAL CENTER  
LARGE ANIMAL CLINICAL SCIENCES 2021-22**

Faculty

Dr. Steve Adair	Equine Performance & Rehabilitation and Equine Surgery – Section Chief
Dr. David Anderson	Associate Dean of Research
Dr. Genevieve Bussieres	Anesthesia
Dr. Marc Caldwell	Farm Animal Field Services
Dr. Elizabeth Collar	Equine Surgery
Dr. Madhu Dhar	Research Associate Professor
Dr. Meggan Graves	Field Services Emergency
Dr. Chiara Hampton	Anesthesia
Dr. Melissa Hines	Equine Internal Medicine
Dr. Phil Jones	Equine Surgery
Dr. Stephanie Kleine	Anesthesia
Dr. Andrea Lear	Farm Animal Field Services
Dr. Eric Martin	Equine Field Services
Dr. Karen McCormick	Equine Internal Medicine
Dr. Pierre-Yves Mulon	Surgery
Dr. Charlene Noll	Emergency / Critical Care
Dr. Tulio Prado	Theriogenology
Dr. Reza Seddighi	Anesthesia
Dr. Christopher Smith	Anesthesia
Dr. Joseph Smith	Farm Animal Medicine and Surgery
Dr. Carla Sommardahl	Equine Internal Medicine – Section Chief
Dr. Tena Ursini	Equine Performance & Rehabilitation
Dr. Neal Valk	Equine Field Services
Dr. Ricardo Videla	Farm Animal Medicine and Surgery – Section Chief
Dr. Brian Whitlock	Farm Animal Field Services / Theriogenology

Residents

Dr. Morgan Adkins	Farm Animal Field Service
Dr. Caroline Benham	Internal Medicine
Dr. Stephanie Dantino	Anesthesia
Dr. Rachel Fladung	Internal Medicine
Dr. Abigail Geick	Field Service, Equine
Dr. Caroline Benham	Internal Medicine
Dr. Remigiusz Grzeskowiak	Surgery
Dr. Pablo Jarrin	Theriogenology
Dr. Ann Oakes	Equine Performance & Rehabilitation
Dr. Rebecca Rifkin	Surgery

Interns (2021-2022)

Dr. Casie Riegel	Rotating
Dr. Jessica Garcia	Rotating

## Staff

Jeremy Davis

Resident Farrier

Dawnya Breeding  
Danielle Browning  
Kaitlin Bruce  
Virginia Calloway  
Elizabeth Croy  
Laura Fischer  
Mary Passmore  
Dawn Phillips  
Marcella Viart  
Arie Wolff

Veterinary Technician – ECC  
Veterinary Technician - Surgery  
Veterinary Technician - Rotating  
Veterinary Technician - Field Service  
Veterinary Technician - Research  
Veterinary Technician – ECC  
Veterinary Technician - Farm Animal  
Veterinary Technician - Equine Rehabilitation  
Veterinary Technician – Cherokee Theriogenology  
Veterinary Technician – Equine Surgery

Glenn Beard  
Josh Bowlin  
Charla Clevenger  
Ray Ellison  
Alexis Engelen  
Devin Munsey  
Daniel Stafford  
Lori Terrones  
Christine Weaver  
Carolyn Wilson

Veterinary Assistant – Clinic  
Veterinary Assistant – Clinic  
Veterinary Assistant - Clinic  
Veterinary Assistant - Cherokee Farm  
Veterinary Assistant - Clinic  
Veterinary Assistant – Clinic  
Veterinary Assistant – Clinic  
Veterinary Assistant - Clinic  
Veterinary Assistant – Cherokee Farm  
Facilities Manager

Lisa Amelse  
Melaney Dudley  
Catheryn Hance  
Amy Van Skyhawk

Laboratory Technician - Research  
Accounting Specialist  
Business Manager  
Administrative Support Assistant

# Dress Code

## Purpose

The purpose of the LACS dress code is to promote a **PROFESSIONAL** and **SAFE** teaching and learning environment in order to project the vision of professionalism and competence to clients, colleagues, classmates, and clinicians.

## Acceptable Dress

- Students should wear proper hospital attire during all official activities (treatments, appointments, seeing clients, rounds), including weekend and emergency duties. Attire should be neat, clean, and professional. Students should have **TWO** sets of acceptable attire for each specific rotation. Students are expected to change clothes if they become soiled or contaminated. Nametags should be worn at all times that safety permits. Students are expected to be well groomed and are discouraged from wearing loose or dangling jewelry. Fingernails should be clipped short or students will be prohibited from performing transrectal exams and assisting in surgery.
- Students with religious or cultural dress requirements should contact the senior clinician for guidance on dress code requirements. Students are responsible for knowing the specific attire required for each rotation. General guidelines are described below.

## Pants

Pants should be blue, black or khaki colored, jean or khaki variety with minimal embellishments, relaxed fit, and free of any stains or tears. They should fit in a way to not allow skin or undergarments to become exposed on the lower back or ankle regions. Capri pants are unacceptable. Dresses, skirts, shorts, or skorts are unacceptable in the large animal hospital. Athletic gear including leggings, jeggings, yoga pants, or stretch pants are unacceptable.

## Shirts

Shirts should cover the point of the shoulder and bust. Solid colored scrub tops or collared shirts are acceptable. Professional long sleeve pullovers are acceptable. Hoodies, t-shirts and tank-tops are unacceptable.

## Footwear

Closed-toe shoes or boots should be worn at all times. Some rotations may require waterproof boots for biosecurity reasons. Shoes should be protective and cleanable. Footwear should be cleaned daily or whenever soiled with blood, feces, hair, dirt, or exudates.

## Outerwear

Appropriate outerwear is acceptable when required. It is expected to be clean and professional. Coveralls are acceptable on some rotations.

## Surgical Attire

Students should have at least one set of clean scrubs and lab coat available for use in surgical suites.

## Penalty

Students found to be present in the Large Animal Hospital in unacceptable dress will be asked to change to their second set. If students do not have an acceptable second set, they will be asked to leave the hospital and will be marked with an "unexcused absence" for the day. Days will need to be made up as per each rotation's policy. Students may be confronted about their dress by technicians, house officers, or clinicians.



## Specific Service Requirements

### In house Equine rotations (Medicine, ESLR 1, 2, Performance and Rehab)

- Khakis or jeans, solid scrub top or collared shirt as described above.
- Closed toed shoes
- Long sleeve professional pullovers permitted (no hoodies)
- Clean and professional vests permitted

### Equine Surgical Suites

- Clean scrubs that are not worn elsewhere in the clinic
- Separate set of clean shoes work only in surgical area (ex. Crocs or clean athletic shoes)
- Scrubs, surgical shoes, shoe covers, mask, and cap are required for entry to the surgical suites
- Scrubs and surgical shoes are required for entry to "secondary surgical areas"- standing surgery, recovery suites, storerooms and prep area.
- Coverall or lab coat should be worn over surgical scrubs when re-entering the stalls or clinic area in between surgeries.
- An extra pair of scrubs should be available if the first pair becomes soiled or contaminated.

### Farm Animal Surgical Suite

- Clean scrubs that are not worn elsewhere in the clinic
- Separate set of clean shoes worn only in the surgical area
- Scrubs, surgical shoes, shoe covers, mask, and cap are required for entry to the surgical suites
- Coverall or lab coat should be worn over surgical scrubs when re-entering the stalls or clinic area in between surgeries.
- An extra pair of scrubs should be available if the first pair becomes soiled or contaminated.

### In house Farm Animal rotation

- Khakis or jeans, solid scrub top or collared shirt as described above.
- Long sleeve professional pullovers permitted (no hoodies)
- Waterproof shoes/boots
- Coveralls are allowed

### Field Service

#### Farm Animal

- Khakis or jeans, solid scrub top or collared shirt as described above.
- Long sleeve professional pullovers permitted (no hoodies)
- Waterproof shoes/boots/or pullover shoes
- Coveralls are needed for most farm animal calls
- **Dress appropriately for the weather, especially during winter or rainy months**
- In the summer months, (students and faculty will discuss when this is appropriate) shorts may be worn under coverall because of the risk of heat exhaustion.

## Equine

- Khakis or jeans, solid scrub top or collared shirt as described above.
- Long sleeve professional pullovers permitted (no hoodies).
- Closed-toe shoes or boots. No athletic shoes or “sneakers”.
- Dress appropriately for the weather, especially during winter and rainy months.
- Coveralls and rubber boots/pullover shoes are permitted, but not required.

### A. INSTRUMENTATION

Senior students will be expected to supply their own instruments and supplies. The following must be immediately accessible at all times:

1. Bandage scissors
2. Rectal thermometer
3. Light source (penlight acceptable)
4. Stethoscope
5. Hoof pick
6. Surgery scrubs and lab coat
7. Coveralls (availability of TWO pairs for field services)
8. NAME TAGS
9. Rubber boots (field services and isolation - equine medicine/ECC)

### B. DUTY HOURS

- Regular clinic hours are 8:00am to 5:00pm Monday through Friday.
- If you are absent for any reason, you must alert the clinician in charge of the clinical rotation as to your whereabouts and how you can be reached.
- Student responsibility for hospitalized cases
  - Day-time students
    - Weekdays: 7:30am to 8:00pm; earlier or later if work is not finished
    - Weekends and Holidays: 7:30am until work is finished; students must check with the clinician or house officer on duty before leaving on a weekend or holiday morning
    - Emergency duty as scheduled
  - Emergency and Critical Care Students
    - Monday-Saturday 6:00 pm – 7:30 am
    - Sunday night off if workload allows
- **Remember:** You are personally responsible for your cases 24 hours a day, 7 days a week!

**Student Rotation Attendance:** Students are generally assigned to a rotation from a Monday at 8:00 a.m. until a Monday at 7:59 a.m. However, when a holiday falls on a Monday (such as Labor Day), the previous rotation will be extended until the following Tuesday at 7:59 a.m. For example, a student who started a 2-week Pathology rotation on Monday, August 24, 2020, at 8 a.m. would have ended the rotation on Tuesday, September 8, 2020, at 7:59 a.m. because Monday, September 7, was the Labor Day holiday.

### C. CLINICAL ASSIGNMENTS

- Clinic duty will begin at 8:00am on the first day of assignment and will terminate at 8:00am on the first assigned day for the next rotation.
- Students are requested to complete a clinic rotation evaluation at the completion of each clinical rotation using the One45 computer program. These are used to detect deficiencies in the clinical rotation and provide suggestions for improvement. We take these evaluations

seriously and we appreciate students' input.

#### **D. CLEANLINESS AND PROFESSIONALISM**

- A great deal of effort is required to maintain a hospital environment where large animals are housed. Please clean up as you go. In animal work areas, stocks, etc., clean up as soon as the animal is safely back in its stall or has been discharged. Clean and return all equipment to its proper place. The technicians should not have to clean up after students.
- Cleanliness and orderliness in the records and rounds rooms: Each student will have access to a small locker in which to keep the small items needed frequently throughout the day. Please keep these student areas tidy. Anything which will not fit in this locker must be kept either in the locker upstairs, the car, or at home.
- The reception area is a public space and we expect this area to create a good impression on the visiting public. Please do not use this area for idle conversation or case discussions because the receptionists must converse over the phone and with clients. In addition, all information regarding patients is private and should not be discussed where others can hear.
- It is important to maintain the hospital in an organized manner for the safety of the animals. The wards must be free of objects such as buckets, hoses, lead ropes, etc. Be sure to keep the patients stall boxes clean as well.
- Food and drink are NOT ALLOWED in the Large Animal Hospital. The only places you may consume food or beverages are in the records room, rounds rooms, or student break room.
- Smoking is NOT permitted on any campus property including parking lots. No form of tobacco is allowed in the Large Animal Veterinary Teaching Hospital.
- Lack of cleanliness will be reflected in your final grade.
- Pregnancy: The greatest potential hazards are accidents which may occur while working with animal patients. Such accidents may cause physical injury to the student and/or her unborn child. Additional potential hazards include exposure to toxic agents, hormones, infectious organisms, inhalation of anesthetics, radiation and stress of physical exertion. Students should always be cautious when working with animal patients to prevent injury to themselves or the patient. Precautions should also be taken to minimize necessary exposure to the pharmacologic, infectious, and radiation hazards listed above. Total avoidance of these potential hazards will not be possible in the veterinary curriculum. Students should utilize all previous training and current instructions to minimize hazards to themselves, their patients, their unborn children, and associates. The pregnant student should contact a physician immediately for advice concerning ways to minimize exposure to potential hazards that may be associated with a veterinary student's educational assignments including the advisability of interrupting her program of study during the pregnancy. In order to minimize the possibility of injury it may be advisable for a pregnant student to continue as a regular student only with schedule and assignment changes aimed at reducing such risk. In rare instances, where substantial evidence confirms the danger of exposure of mother or fetus to materials or substances which must necessarily be handled in completing an assignment or course requirements and for which adequate protective measures are not reasonably available, a student may even be required by the College to postpone participation in such course or assignment.

#### **E. ROUNDS**

- Daily Rounds. The student in charge of the case will record vital parameters and observations and administer morning medications to each animal daily before rounds. Rounds for each clinical block are described in more detail under respective block guidelines.

- Emergency duty rounds will be held:
  - Every evening at 6:00 PM to present plans for the evening
  - Saturday, Sunday, and holiday mornings at 8:30 AM to discuss case progress/plans
- Case-based Grand Rounds
  - Grand Rounds will be held every Thursday morning at 8:00 AM.
    - Equine group (Medicine, Field Services, Surgery, Performance and Rehabilitation) will meet in the Large Animal Classroom.
    - Farm Animal Group (Medicine and Surgery, Field Services, Therio) will meet in the Large Animal Conference Room.
  - All students should come prepared to present any of their cases from the previous week.
  - Once the case is presented, faculty or house officers may then ask questions surrounding the pathophysiology, mechanisms, etc. related to that case (the focus should not necessarily be on diagnostics and treatment but more about WHY and the mechanisms related to those diagnostics and treatment decisions).
  - It is expected that 3-5 cases will be discussed each week.  
Performance in Grand Rounds will be considered when grading clinical rotations.

#### F. EMERGENCY ROUNDS AND DUTY POLICY

- Two or three students will be assigned to cover each emergency shift for in-house patient care and emergencies.
- Nighttime emergency duty for in-house patient care and emergencies begins at 6:00 PM Monday – Saturday and is covered by the Emergency Critical Care Rotation students.
- Sunday night emergency duty for in-house patient care and emergencies begins at 6:00 PM and is covered by students on the in-house large animal daytime rotations.
- For each night-time and weekend day emergency shift there is a designated “on-call” student which is covered by the in-house large animal daytime rotation students. This student must be able to be at the clinic within 30 minutes to provide assistance if needed.
- Weekend daytime emergency duty for in-house patient care and emergencies begins at 7:30 AM and is covered by the in-house large animal daytime rotation students.
- A minimum of two people are required to be treating patients at all times during emergency shifts.
- A separate field services student will be assigned for each emergency shift for all field services emergencies. This student may be asked to assist for in-patient care and emergencies if needed. This student must be able to be at the clinic within 20 minutes.
- Daytime students assigned to a case will be responsible for patient monitoring and treatments from 8:00 AM until 8:00 PM treatments during the week.
- Students scheduled for in-house emergency duty (including on-call students) are required to attend the 8:30 AM (weekend mornings) or 6:00 PM (evenings) ward rounds prior to their emergency shift.
- The daytime student assigned to each case must be present to present their case(s) to the emergency team during ward rounds (6:00 PM weekday evenings, 8:30 AM weekend and holiday mornings). This student is NOT required to be present for the 6:00 PM ward rounds held on weekend or holiday evenings.
- There will be little to no exceptions to this policy and any absence must be cleared in advance with the clinicians covering the emergency services. Unexpected absences will penalize your grade, and/or you may be assigned additional overnight duties.
- **Weekend duties:** In order to maintain case continuity and ensure patient care the following

guidelines need to be adhered to. Weekend duties and patient care are an extension of your rotation; therefore failure to follow the following will affect your grade for this rotation.

- Morning treatments (on each rotation)
  - i. At a minimum, there should be one more student than there are patients. For example, if there are 3 cases, then 4 students should be present. If there are multiple, intense cases then additional students may be required.
  - ii. You are responsible for your patients' morning treatments and examinations. These cannot be transferred to another student unless your absence has been excused in advance by your senior clinician (not just the ECC clinician).
  - iii. If you come in for morning treatments, you also need to stay for 8:30 AM rounds.
  - iv. Remember we are a team so helping one another perform treatments before and after rounds should also be done.
  - v. If your patient is requiring a treatment or evaluation after rounds, you should remain at the hospital until it is completed (unless otherwise stated by the senior clinician). A change in the number of cases over the weekend affects the number of students required to be present. For example, if there were 3 cases on Friday evening but by Saturday afternoon there were 4 cases, a minimum of 5 students would be required on Sunday morning.
  - vi. The students on the affected rotation are the ones responsible for ensuring the correct number of students is present.
- 6 PM rounds
  - i. Only the night-duty (including on-call) and students that were on during the day need to attend
- Evening (8 PM) treatments
  - i. One student is present per case (One of these students can be the day-time student).
  - ii. This duty can be shared across the rotation, you are not specifically required to perform your patients evening treatments.
- Regarding UT owned animals (e.g. blood donor animals).
  - i. Because they have minimal requirements, these can be grouped as one case and cared for jointly amongst the students on the rotation.

#### **G. EMERGENCY SCHEDULE (SAMPLE)**

The emergency faculty manages the in-house emergency schedule and Dr. Graves handles the field services emergency schedule for each block. Every attempt will be made to honor requests regarding the emergency schedule.

Sample emergency schedules (subject to change or amendment depending on student availability):

Monday – Saturday NIGHT <ul style="list-style-type: none"><li>• 6 PM to 7:30 AM</li><li>• Sunday night off (if workload allows)</li></ul>
ECC students (2-3 students) from the in-house large animal daytime rotations

Sunday NIGHT 6 PM to 7:30 AM
2 students total from the in-house large animal daytime rotations On Call: 1 student from the in-house large animal daytime rotations

Saturday, Sunday, and Holiday DAY 7:30 AM to 7 PM
3 students total from the in-house large animal daytime rotations On Call: 1 student from the in-house large animal daytime rotations

**Field Service** sample emergency schedules (subject to change or amendment depending on student availability):

Monday – Thursday NIGHT 5 PM to 8 AM
Friday NIGHT 5 PM to 4 AM

Saturday & Sunday (2 SHIFTS) 4 AM to 4 PM 4 PM to 4 AM
Sunday PM Shifts run to 8 AM Monday Morning

If you know that you will have a major conflict during your large animal rotation, please contact Dr. Noll (for in-house rotations) or Dr. Graves (for field services) at least 1 month prior to the start of the rotation. Dr. Noll will make every attempt to honor requests for days off of emergency duty, however you may be required to find a classmate to switch duties if the request is unable to be honored (due to timing, student availability, or reason for request).

**H. PERIMETER GATES AND ANIMAL CONTAINMENT**

- **ALL** perimeter gates are to be closed at all times except when a vehicle, truck and trailer, semi-truck etc. are proceeding through the gate. All gates should be closed before clients or our staff are off loading animals.
- Doors to the clinic that lead to outside are to be closed at **ALL** times except when an animal is being brought in or the veterinary assistants are removing bedding and returning. The doors should be closed behind the animals, owners and personnel after they have entered or left the facility.
- In food animal all internal gates and external doors should be closed when personnel are working on patients or cleaning stalls and should be closed at the end of the day and all night long.
- In general, if you see a gate or door open and there is nothing going through it, Close It!!

**I. RECEIVING**

- Students will be assigned (or may select whenever feasible) individual cases as soon as the appointment is made by the receptionist and must be present when the client arrives. The student

will introduce himself/herself to the client, do all the pertinent receiving paperwork, perform the preliminary physical examination and work-up on the patient. The student should then notify the clinician and together they will identify the problems, and attempt to establish a tentative diagnosis or diagnostic plan.

- Students should sign up for cases as early as possible and then read up on the presenting problem in advance to maximize learning.
- All students are expected to participate and observe the examination and handling of outpatients unless working directly with another instructor on an inpatient which must be cared for immediately.
- The student on the case is responsible for writing up the complete history and for recording all observations including results of any diagnostic techniques (i.e. nerve blocks). The student is also responsible for seeing that the requested radiographs are taken and laboratory samples are submitted properly.

## **J. ADMITTING**

- Once it is decided that an animal is to be admitted to the hospital, it will be placed in a stall, and an identification card immediately placed on that stall. The animal will be bedded appropriately and provided water. Feeding instructions should be noted on the treatment sheet once confirmed with the clinician responsible for the case (consult with the owner as to normal feeding of the patient i.e., type and amount of hay, grain, concentrates, etc.). Lead ropes, leg wraps, blankets, etc., will be sent home with owner but their halters may be left with the animal (cattle halters may also be sent home).
- If an admitted patient is known to be dangerous or has idiosyncrasies, put a warning sign on the door and the escape door (small door at back of stall).
- Any horse which is admitted to the hospital must have proof of a negative Equine Infectious Anemia (Coggins) test. If one is not available, the clinician in charge should be informed and a blood sample drawn.
- Halters should not be left on animals when in the stall unless deemed necessary due to the behavior of that animal.

**Contagious Disease Suspects: Isolation stalls exist for animals that may present a threat to the health of other animals and people in the hospital. These animals should not be admitted to the wards, hallways, surgery rooms or examinations rooms in the hospital! They are placed immediately in isolation stalls.**

The following animals constitute infectious suspects:

1. Any animal presented with a history of a possible infectious disease process.
2. Any animal with an acute respiratory disease.
3. Any animal with an acute diarrhea.
4. Any animal with acute neurologic disease.

Only animals requiring isolation are put there. No animal is ever put there for convenience or because of a stall shortage.

## **K. RECORDS / CHARTS / CLIENT COMMUNICATIONS**

- If a patient is not admitted to the hospital, complete the chart as necessary and present it to the attending clinician for final approval.
- If a patient is admitted to the hospital, keep and maintain the chart and records in the appropriate records room and chart holder. As legal documents, every admission into the records must be

- signed (not initialed) in ink.
- Records are to be kept in detail and up to the minute! They are legal documents that are not open to everyone.
- On the initial evaluation of every patient, record its tattoo or other identification number on the examination sheet, along with markings, scars, or blemishes and weight. Record weight on discharge too.
- Records are not to be removed from the Large Animal Veterinary Teaching Hospital.
- Communication with the owner: you should discuss a case with the owner only if the clinician has authorized you to do so. This refers to personal as well as phone conversations. Students are not authorized to call clients unless directed to do so by a clinician.

#### **L. CARE OF ANIMALS IN CLINIC**

- Vet Assistants will bed, feed grass hay, and water as instructed. In special cases, students may be required to regulate feed or water intake.
- The student on the case is responsible for:
  - Obtaining dietary history from the owner including type and amounts of hay and grain normally fed. This should be recorded in the history portion of the record.
  - Feeding grain: the student should check with the clinician to confirm exactly which grain and how much should be fed
  - Being sure the animal always has clean water available
  - Offer a salt and/or mineral block to hospitalized patients
  - Monitor appetite
  - If the animal is not to receive feed a “Do Not Feed” or “Student Will Feed” sign should be placed on the front AND on the back of the stall.
  - Pick manure from stalls as necessary. Record defecations on the treatment sheet.
- Grooming and picking of feet daily
- When concentrate grain is to be fed to an animal, it is the student's direct responsibility to feed the concentrate and to feed the right kind of concentrate for the species involved. The clinician must be contacted to prescribe the proper diet.
- The proper amount must be fed - acidosis, endotoxemia, laminitis, etc. can occur from improper feeding. Increases in feed should be gradual.
- If an animal has undergone surgery, the clinician should be consulted prior to offering any feed
- If concentrate is fed in the morning and it is not eaten, remove it and give fresh feed at the next feeding. Even healthy animals will not readily eat stale, fermented or soiled feed.
- Unless otherwise directed, all animals should have water available at ALL times
- If a student observes an animal that has no water, the water bucket should be filled immediately (unless there is a “No water” sign on the stall door).
- Daily grooming, feet cleaning, etc., is the direct responsibility of the student. This is a hospital and all animals should be ready for a visit from their owners at all times. Proper grooming and hygiene is instrumental in the health and well-being of every patient.
- At times it is necessary for the student in charge of a case to clean the stall, as feces should be recorded and removed from the stall as soon as possible. The vet assistants in the clinic are always very helpful in this regard. Please be respectful and courteous to them. Portable manure bins are available in the equine and farm animal clinics.
- UT Animals/Donations - We have university horses, cattle, goats, sheep, and alpacas confined to the clinic for various purposes. These may be assigned to students during their rotation. Besides the normal care required, they must also be observed daily for ill health. It is not always necessary to SOAP them every day, but it is necessary to perform a physical exam, observe for



- any abnormal behavior, and be groomed daily. If you see anything unusual, notify a clinician.
- Never move an animal to a new stall without the approval of a clinician or house officer.

#### **M. TREATMENTS**

- Technicians will be present each weekday morning to assist with treatments.
- Students must not treat animals alone. If the technician is not available, students in each group will help each other in the examination, care, and treatment of patients. Students should work in pairs during treatments, with one student restraining while the other administers the medicine. A halter and lead rope should always be on a horse when it is being examined.
- Any special procedures other than a general physical examination should be done only after consulting the clinician in charge or under their direct supervision. This includes intravenous injections, catheter placements, and passage of nasogastric tubes.
- Students must be familiar with all medications, route of administration, frequency and potential side effects. When in doubt, contact the clinician in charge.
- If possible, all patients should be weighed when they are admitted to the clinic and the weight should be recorded. If a long term hospitalization is anticipated, weekly weights and weight at discharge should be recorded.
- All observations, treatments, and medications must be written in the charts immediately and signed in full. Record the time and the date. All entries must be in ink.
- The student in charge of a case is directly responsible for all of his/her treatments.
- Do not change treatment of any patient without consulting a clinician. In the event of an emergency, contact any clinician for emergency advice.
- Make sure you have all requirements posted before 6:00 p.m. nightly rounds.
- For animals admitted for surgery, the student is directly responsible to post no-feed signs (front and back doors) and/or apply a muzzle 12 hours before surgery.

#### **N. RADIOLOGY**

- Whether the animal is an in-patient or out-patient, if it requires radiographs, it is the responsibility of the student in charge of the case to make appointments for radiographs with the radiology personnel as far ahead of time as possible. Before radiographs are taken, completely fill out a radiograph request sheet, including history, signs, special examination results, etc. Be sure to clearly state all problems and DO NOT use abbreviations.
- If restraint is necessary, either chemical or physical, in order to get the radiographs or any other procedure accomplished, contact the attending clinician or house officer only.

#### **O. DEATH OF AN ANIMAL**

- Notify the instructor immediately when an animal dies
- The animal must immediately be taken to necropsy. It should be tagged with the case number, animal and owner name, and plan for disposal when it is taken to necropsy.
- Large animals must be transported using the forklift. Students are not permitted to operate the fork lift. Please ask a vet assistant or trained house officer for assistance.
- Smaller animals can be transported on a gurney or hay cart. Please place a towel or tarp over the animal when transporting it through the hospital to necropsy.
- A body disposal form and necropsy request must accompany all animals to necropsy.
- Halters and any other tack including shoes, neck tags, and magnetic feeders from the dead animals should be taken to the appropriate technician with the owners name and case number so they can be sent to the owner.
- The clinician, resident, and students are responsible to attend the 4:30 p.m. Pathology Rounds in

the VTH Necropsy Theater when a patient they have cared for has been necropsied that day. They are encouraged to go any other day as the work load permits.

## **P. SUBMISSION FORMS**

- Necropsy: Web-based form
  - A necropsy form (web-based) is to be filled out completely including all pertinent history, lab data, and treatments. Be sure to indicate if zoonotic disease is possible.
  - Consult with the clinician on appropriate type of necropsy (full, teaching only, restricted) and if additional tests are authorized.
  - Clearly indicate if cremation is requested.
  - The printed necropsy request form and the body release form (signed by the clinician) must both be taken to necropsy and placed in the labeled file.
  - Obtain a necropsy identification tag (from the Necropsy Viewing Room). Fill in the details and fasten the tag to the animal: case number, owner's name, clinician's name and "Necropsy", "Disposal only", "Cremation", or any other note that is applicable.
- Biopsy Request: web-based form
  - Provide details of each lesion and indicate for what each biopsy is to be checked.
  - List problem assessment and differential diagnoses.
  - Clinician in charge and the surgeon's name are both tagged in the document. Results are emailed to the designated clinicians and students.
  - Ask a technician for formalin bottles for your biopsy sample.
  - As soon as the biopsy or tissue is taken and properly identified (with owners name and case number on the bottle, not lid) the tissue and the printed histopathology sheet should be delivered to necropsy window on the first floor.
- Parasitology: tests are ordered by computer.
  - Specimens should be delivered to A233 for prompt service.
  - Outpatient specimens will be examined immediately.
  - After-hour or low priority specimens may be left in the designated refrigerator in the hallway near the large animal pharmacy window.
- Clinical Pathology: tests are ordered by computer; a web-based form must also be completed for cytology requests.
  - Any samples submitted after 4:00pm on weekdays or 11:00am on Saturdays will be processed the following working day; exceptions should be arranged with the duty clinical pathologist or senior laboratory technician on duty.
  - Clinical pathology results will be on the CPRS computer network and cytology results are sent via email.
  - Stat requests should be kept to actual emergency requests
  - Students are not to enter the lab for the purpose of checking on lab work. This only delays the technician's work. Results will be available as soon as the work is complete.
- Microbiology and Virology: tests are ordered by computer
  - During clinic hours, cultures are to be taken to the lab.
  - Cultures taken after clinic hours may be placed in the refrigerator and taken to the lab the next morning by the student
- Pharmacy
  - A pharmacy order should be submitted in prescription form and signed by the clinician responsible for the case.
  - The pharmacy is closed at 1:00pm on Saturday and all day Sunday so medication needed for the weekend must be filled in advance.
  - Please review the correct prescription format for writing requests.

- Other forms: Ask for instructions from a clinician or technician.

**Q. DISCHARGE:** When a patient is to be sent home, it is the duty of the student to:

- Place a “Going Home” sign on the stall door the morning of discharge.
- Weigh the animal and record it with the date on the history sheet.
- Prepare a draft of the discharge instructions for the clinician’s approval. Notify the clinician or house officer of the draft discharge instructions on the computer. After the discharge instructions are approved and signed by the clinician, print them out and present the chart to the accounting secretary in the large animal office and await the final departure.
- Clean out the medication box for the animal and give any unused medications or materials to the technician on the service.
- Groom or if necessary bathe (with clinician approval) the horse prior to owner arrival.
- Finish the medical record information including all SOAPs, filling out the case summary form, and check to be sure all papers are signed.
- Unless discussed with the clinician on the case, the student primarily responsible for the case is responsible for the discharge of the patient. If the animal is to be discharged when you are not available, leave a note in the chart as to what needs to go home with the patient (medications, blankets, shoes, etc.). Any medications to be dispensed must be obtained from pharmacy. It also helps to go over the discharge instructions ahead of time with the owner by phone. Therefore you can answer any questions they may have at that time.
- After hours discharges must be approved by clinician in charge and coordinated with receptionist and the emergency team.
- When an animal is being discharged, the clinician in charge should be notified so they can talk to the client about after care. In the absence of the clinician in charge, notify another instructor.
- Be sure the owner is sent home with all medications and any items that were left with the horse (blankets, leg wraps, shoes, etc.)
- Give the owner a chance to pay the bill and turn in the chart.
- Assist the owner in removing the animal from the clinic but not in loading the animal into the trailer or van unless requested to do so by the owner.
- All preparations for discharge must be done in advance so that everything is ready and waiting when the client arrives.
- After discharge, the completed record should be turned over to the attending clinician.
- Put a “Please Clean Stall” sign on the front sliding door to show that the horse has gone home. This is important since it indicates to the vet assistant that the horse has been discharged and the stall should be cleaned.

**R. CLINICAL COMPETENCIES (AVMA Statement):**

- Veterinary graduates must have the basic scientific knowledge, skills and values to practice veterinary medicine, independently, at the time of graduation.
- At a minimum, graduates must be competent in providing entry-level health care for a variety of animal species.
- The school/college must provide evidence that students/ graduates have had adequate access to primary care cases and hands-on experiences with live animals and must address clinical competencies in the following areas:
  1. Comprehensive patient diagnosis and demonstration of problem solving skills (e.g., appropriate use of clinical laboratory testing, and record management)
  2. Comprehensive treatment planning including patient referral when indicated
  3. Anesthesia and pain management, patient welfare

4. Basic surgery skills, experience, and case management
  5. Basic medicine skills, experience, and case management
  6. Emergency and intensive care case management
  7. Health promotion, disease prevention, zoonosis and food safety
  8. Client communications and ethical conduct
  9. Strong appreciation for the role of research in furthering the practice of veterinary medicine.
- In order to meet the above requirements, a **Large Animal Clinical Skills List** was developed to ensure students are competent on a variety of skills in large animal – completion of a set number of these skills is a requirement for graduation

#### **S. HOSPITAL SECURITY**

This is everyone's responsibility and the students on duty are to help by checking all doors after hours. Tours are not to be given after hours and all unauthorized persons are to be escorted out of the building. If you need help, call: Campus Security, 974-3111. Stop and inquire of any person in question. If any questions or problems, please contact security. The front doors to both the Large Animal and Small Animal Clinics are locked at 6:00pm daily, at 12:00 noon Saturday and all day on Sunday and holidays.

#### **T. DRUGS IN THE LARGE ANIMAL CLINIC**

A small inventory of drugs will be kept in each treatment area, the equine storage refrigerator and the food animal pharmacy. Drugs which are needed for individual cases should be obtained from the OmniCell or from the main pharmacy. When the patient is discharged, please return the unused portion of the drugs to the Large Animal technicians.

Great care must be taken with food animal patients and administration of drugs. This is to comply with the withdrawal times and strict FDA regulations. You should be fully aware of these regulations and their implications to you. Extra label use includes non-recommended dosages. Keep cognizant of all the applicable regulations. There are withdrawal forms that are to be filled out on every food animal case (except camelids), regardless of the drug that is administered.

The following is part of the Pharmacy Policies and Procedures:

- Any medications not used by a patient in hospital, or returned by a client shall be returned to the Pharmacy for destruction in compliance with Board of Pharmacy regulations. If any collections of such leftover drugs are known to Pharmacy staff, they will be confiscated and destroyed. Any drug once dispensed is for the original patient and is considered adulterated if used on another patient.
- The Pharmacy will not prepare a label for or provide packaging for any drug not dispensed from the Pharmacy pursuant to current prescription. Any drug not coming from the Pharmacy must legally be considered adulterated by Pharmacy staff. In other words, do not ask us to make a label for a drug taken from what is commonly known as "good sam" stash. Do not ask us for vials or bottles. We cannot do that legally. If the pharmacist knew that there were in fact collections of extra drugs, he would have to have them destroyed. There is strong consideration for saving clients' money, but there are also laws that must be followed as well as ethical practice considerations.

#### **U. ADMINISTERING THERAPEUTICS**

Medications may be administered to large animals via the oral, intravenous, intramuscular, or subcutaneous route. Consult the clinician, resident, intern or technicians prior to giving any

medications for the first time to a large animal. In general, a description of the techniques for intravenous, intramuscular, or subcutaneous injection is found below.

### **Intravenous injections:**

- Stand on horses' left or right side and occlude the jugular two thirds down the neck. Vein is quite large, about the diameter of your thumb, but it can be hard to find in thick necked or shaggy horses. Patting the jugular with a finger should create a fluid wave and give you an indication of the position of the vein.
- Remove the needle from the syringe barrel and pop into the vein with one swift, decided motion. Dark, low pressure blood should drip out of the hub of the needle.
- Stabilize the nub of the needle with one hand, attach the syringe with the other.
- Withdraw blood into the syringe to assure yourself that you are still in the vein.
- Inject at a moderate rate, withdrawing blood about halfway through to make sure you are still on target.
- Withdraw needle and syringe in one motion.

### **Perivascular administration of an IV medication**

- With benign substances (e.g., fluids), there will not be a big problem
- With phenylbutazone, oxytetracycline, and some other irritating substances, a potential catastrophe is possible. Flood the area with sterile saline, SQ to dilute the irritating drug. Some people add a bit of dexamethasone to the saline. Cold water hosing of the site may be helpful.
- **ALERT THE SUPERVISOR TO ADVISE THE OWNER.** If you fail to do this and the horse develops a problem, you are very liable indeed.

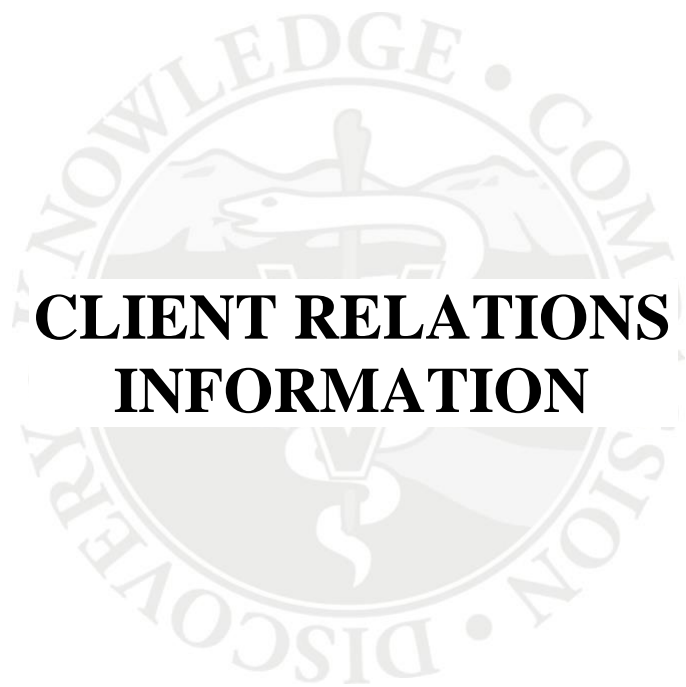
When giving an IV medication, the horse suddenly gets weird, stiff, convulses, falls down and give the impression of death □ Drug went in the artery. Despite the drama of the situation, most of these horses get up and look perfectly normal in 10-30 minutes.

### **Intramuscular injections**

- A lot of controversy exists about where they ought to go (so check with the clinician about their preference).
- Small volumes may be administered in the neck muscles in triangle formed by spine, nuchal ligament and shoulder muscle. Keep away from the cervical spine at all costs!
- Large volumes in pectorals or in the semi-membranous/tendinous area.
- Grasp needle firmly and punch it into horse with a firm, swift stroke. Horses' skin is tough, like a football, so there will be considerable resistance. If you are too wimpy, the needle will bounce off and the horse will get annoyed, so use some force. The needle should be buried to the hub.
- Stabilizing the hub with one hand, attach the syringe to the hub. Pull back on the syringe to check that there is no blood. If there is, remove the needle and start over.

### **Subcutaneous injections**

- Lift skin of neck, insert needle under skin, inject under skin slowly
- There will be considerable resistance, and a bleb should appear



**CLIENT RELATIONS  
INFORMATION**

## ADMISSION AND DISCHARGE PROCEDURES

- Hours:
  - Regular Large Animal Office Hours: 8:00am until 5:00pm Monday thru Friday
  - Patient Representative at LA Receiving Desk:
    - 7am until midnight Monday through Friday
    - 8am until midnight on Saturday and Sunday
- All admissions and discharges (during regular hours) go thru the receptionist.
- Check the appointment schedule (online) each day so that you can read about incoming cases
- When you have received the records for an admission, you and the client proceed to the receiving area for your rotation and obtain a complete history and perform a physical examination (unless told otherwise).
- When you have completed your examination on a patient, it is your responsibility to locate the clinician.
- Every animal admitted or staying in hospital must have a record (this includes mares boarding with sick foals and vice versa; it also includes Cherokee Lab animals and donations)
- You will receive records in two types of folders: blue folders are for new records; brown folders are permanent records (has previous admissions). If the animal becomes an inpatient, records are transferred to the hard back files kept in record room until discharge. Do not remove previous admission forms from the permanent record but always keep the permanent record with the hard back file if the animal is an inpatient.
- Please notify receptionist(s) of any after-hours discharges. Make sure all paper work and prescriptions are ready for discharge.
- If a student is not going to be available to discharge his/her patient, he/she needs to make sure that someone else will tend to the matter (such as an emergency student).
- Do not discharge an animal unless you have been told to do so
- Doctors need to sign the discharge instructions before the clients pick up their animals
- Do not sign the doctors' names on any form

## TIPS ON PHONE ETIQUETTE

When you use the phone, you represent your College of Veterinary Medicine. What you say and how you say it helps shape client attitudes. When your voice is warm and friendly, when you are courteous and tactful, clients will enjoy dealing with you and the hospital. Just remember, good will often take years to create but only seconds to destroy.

Here are 10 helpful tips on phone etiquette.

1. Answer on the first ring whenever possible. Prompt answers avoid irritation and help build a reputation of efficiency for you and the College.
2. Identify yourself properly. The caller will usually identify himself, too, relieving some formality of a faceless contact.
3. Be friendly and greet the caller pleasantly. Put a smile in your voice. Make the caller feel genuinely glad he/she called.
4. Listen to the caller so repeating won't be necessary. Show your interest, use the caller's name. Take time to be helpful and understanding.
5. Explain when you leave the line - and return promptly. If the caller waits, use the hold button, or lay the receiver down gently.
6. Transfer calls only when necessary. Handle the call yourself if you can. If not, explain the transfer to the caller.
7. Be tactful. If you answer for another, explain coworker's absence from the office carefully and offer to take a message.
8. Take accurate messages. Be sure to write date, time, name, and phone number. Don't hesitate to ask how to spell a name or repeat a number for verification.
9. Use basic phrases of courtesy - please, thank you, you're welcome. Using such phrases is one way to put a smile in your voice.
10. Close call pleasantly. Say good-bye in a way that will leave the caller feeling satisfied and friendly. Let the caller hang up first and always put your receiver down gently.

### TELEPHONE PROCEDURES

LARGE ANIMAL CLINIC	974-5701
SMALL ANIMAL CLINIC	974-5662
VETERINARY TEACHING HOSPITAL	974-8387

#### Regular Hours:

- To dial outside - dial 8 plus the number.
- Within the building - dial "4" plus the extension number you wish to reach.
- Phones are not to be used for personal calls. Students who do so or who make unauthorized long distance calls are subject to disciplinary action.

#### After Hours:

- After hours clients may use the emergency phone outside to contact personnel within the hospital. These calls will go through to the receptionist answering the emergency phones.
- **A receptionist is typically present at the front desk up until 11:00 pm**
- Directory of hospital extensions is posted throughout the hospital.
- If you have any questions, call the resident on primary emergency duty. If the resident cannot be reached, call the secondary on-call resident. If still unable to reach a resident, call the senior clinician on duty. A phone listing of all clinicians is located at the Front Desk and throughout the clinic.



- Faculty cell phone numbers can be dialed from any phone.

Calling Owners:

On occasion, students may contact owners to give them updates. This should be done only after receiving permission from the senior clinician. The student and clinician should discuss what information will be given to the owner before the student makes the call.

When students talk with owners, the purpose is to provide patient updates. Students should not answer questions about the patient, such as prognosis, treatments, laboratory results, etc. The student should respond as follows if more information is requested: “I am the student and was calling to give an update. Dr. \_\_\_\_ would be more than happy to talk with you to answer your questions.”



**ISOLATION, CONTAGIOUS, AND  
ZOOONOTIC DISEASES**

## **ISOLATION PROTOCOL**

### GENERAL GUIDELINES FOR CONTAGIOUS DISEASES OF ANIMALS

Isolation stalls exist for animals that present a threat to the health of other animals and people in the hospital! These animals should not be admitted to the wards, hallways, surgery rooms or examination rooms!

The following animals constitute infectious disease suspects:

- Any horse presented with a history of strangles, viral respiratory disease, diarrhea, or other contagious disease of less than 14 days duration.
- Any horse with a mucopurulent nasal discharge, enlarged submandibular or retropharyngeal lymphnodes and/or are suspects for Strep. Equi infection for any reason
- Any animal with acute or chronic diarrhea of undetermined etiology.
- Any horse with a fever and respiratory signs or neurologic signs
- Any horse with neurologic signs of undetermined etiology that may be caused by EHV-1

### PROTOCOL FOR USE OF ISOLATION AREA

- The isolation area is designed to be a self-contained treatment and housing area to reduce traffic in and out of the area.
- Decontamination:
  - Protective clothing (disposable boots, gloves and gowns) must be worn at all times by all faculty, staff, and students when working with patients with contagious diseases in the isolation area
  - Rubber boots are required and should be stored in the main anteroom. Coveralls are recommended to be worn under the protective gowns.
  - Disposable gowns will be provided as protective clothing for use in the isolation stalls and treatment area and must be worn.
  - Protective disposable footwear will be provided to be worn in the stalls and treatment area and must be worn.
  - None of the protective clothing used in the isolation area should be worn in any other area of the veterinary medical center.
  - Clothing worn under the disposable gowns should be changed prior to leaving the stall anteroom if any chance of contamination occurred.
  - A foot bath or boot disinfection area will be provided. All non-disposable protective footwear should be disinfected before leaving the isolation area.
- All instruments and accessories used should remain in the isolation area. It may be necessary to disinfect or sterilize accessories between patients (dose syringes, twitches, stomach pumps, etc.). The veterinary technicians will oversee this duty.
- The isolation area should be fully stocked between patients. Veterinary technicians and technician assistants are responsible for stocking the isolation area.
- Disinfection:
  - Cleaning of the isolation stalls will be done by the veterinary assistants daily and a thorough disinfecting of the stall and it's anteroom will be done once an animal is removed from the stall permanently.
  - Isolation cart and foot traffic must avoid the drain area of each stall when passing in front of the stall
  - Steam, chemical or high pressure spray disinfection may be used (Roccal, Nolvasan, Clorox, Phenols)
  - All debris should be washed into the drain in the outside aisle in front of the stall door

- The drain area will be cleaned and disinfected after cleaning the stall
- Stall anterooms will be kept clean by the service using the stall
- Isolation treatment areas will be cleaned and disinfected after each use by the service using it and the veterinary assistants
- If any item is needed in the isolation area that is not stocked there, a person must either decontaminate or obtain the items from the clinic or they may have the item passed to them from the clean hallway through the pass window in the treatment storage room. The second means is preferable to reduce traffic in and out of the isolation area.
- The window for the pass through window should be kept closed at all times.
- A list of basic items and medications which are kept in the isolation area will be compiled and referred to for restocking. If items are needed while the isolation area is occupied, a list should be provided to a veterinary technician to stock these items. Please read and follow signs and instructions which are posted in the isolation area.
- The isolation area color code for equipment is orange and red. Isolation area equipment should never leave the isolation area.
- Charges for isolation area use:
  - An additional fee will be charged for isolation area use (see fee schedule). This fee will include boots, gloves, and gowns used in the stall and treatment area. It also includes other disposables that are used for that isolation horse on a daily basis.
  - The normal intensive care fees should be used for isolation patients that require this level of care.
  - All drugs which are used from the routine supply in the isolation area should be charged and noted on the medication sheet in the patient's chart as there will be no pharmacy slip in the record for these drugs.
- If you deplete a drug or item from the isolation area stock please put the item on the want list so that the veterinary technicians may restock it for future use (common courtesy).
- Items not stocked in isolation stalls will need to be brought in for each individual patient. These items include:
  - Patient medications
  - Heparinized saline
  - IV fluids
  - OB lube

## GENERAL PROCEDURE FOR WORKING ON PATIENTS IN ISOLATION

### Before Entering ISOLATION UNIT

1. Put away unwanted items safely (e.g. stethoscope).
2. Wash hands as directed.

### To ENTER the ISOLATION UNIT

1. Enter through the MAIN door directly to the main anteroom.
2. Hang up jackets etc. in locker and put on rubber boots, gloves, and optional coveralls.
3. The clean hallway may be entered and the patients observed through the windows.
4. If entering the stall or treatment area from the clean hallway then enter into the stall or treatment anteroom. On the clean side of the anteroom, you may prepare medications, gather supplies, etc. and place in tote on shelf within reach on other side of footbath area.
5. To enter the dirty area and stall:
  - Put on new disposable boot covers
  - Cross over foot bath area and put on second pair of gloves
  - Put on disposable gown and tie around waist
6. Remember to:
  - Gather all medications etc. required before entering the stall
  - Dip and clean rubber boots whenever crossing over to the clean side of the anteroom
  - Do not exit the stall via the large front sliding door unless taking horse to treatment area or discharging horse
  - Do not exit the restricted area without removing protective clothing.

### To EXIT the Restricted area

1. Make sure stall door is locked!
2. Put away/dispose of consumables etc. (All items are disposed of into appropriately labeled containers)
3. Remove disposable plastic boots and dispose of in trash can
4. Step into foot bath area. Clean rubber boots. Make sure rubber boots are not soiled or contaminated in any way prior to leaving footbath.
5. Untie gown
6. Remove soiled outer gloves and put in trash and pull clean gloved hands into sleeves of gown.
7. Remove gowns and if unsoiled, hang gown in the restricted area for reuse. To remove gowns, peel the gown from the shoulders and arms by pulling on the chest surface with hands inside of sleeves. Remove the gown and hang up with contaminated side against the wall
8. Exit foot bath area to clean side
9. When all tasks are completed, remove inside gloves and dispose of them in trash
10. Wash hands with soap at sink in stall anteroom for 30 seconds
11. Exit to clean hallway. If a PCV/TS is needed, this can now be run on the centrifuge in the clean hallway.
12. When exiting clean hallway, apply alcohol foam to hands at doorway to main anteroom.
13. Enter main anteroom. Remove rubber boots and store in locker. Change clothes if contaminated and place in laundry bag.
14. Wash hands again prior to exiting isolation area to clinic.

## DIARRHEA ISOLATION PROTOCOL

DIARRHEA is defined as feces not formed in balls (Horses, Sheep, Goats, and Camelids) or watery projectile feces (Cattle)

**ANIMALS WITH HIGHEST OR INTERMEDIATE LEVEL CRITERIA BELOW SHOULD GO IMMEDIATELY TO THE ISOLATION UNIT AND REMAIN THERE UNTIL CRITERIA FOR RELEASE ARE MET.**

**Highest Level: DIARRHEA with any ONE of the following:**

1. Loss of appetite
  2. Fever ( $>102^{\circ}\text{F}$ )
  3. Cyanotic or injected mucous membranes
  4. Leukopenia (WBC  $< 4,000$  cells / $\mu\text{L}$ )
  5. Neutropenia (neutrophils  $< 2,000$  cells / $\mu\text{L}$ )
- Full isolation procedures required
  - Confined to stall
  - 5 fecal cultures for Salmonella are REQUIRED (hospital policy): one sample collected per day for 5 days

Only **RELEASED** when **5 negative results are received** or to go home

**Intermediate Level: DIARRHEA that is  $> 12$  hours in duration**

- Full isolation procedures required for 48 hours minimum
- Confined to stall for 48 hours minimum
- 5 fecal cultures for Salmonella are REQUIRED (hospital policy): one sample collected per day for 5 days
- CBC and body temperature monitoring are REQUIRED

You are permitted to **RELEASE the animal EARLY** if:

1. Diarrhea has not been observed for **48 hours**
2. Appetite, body temperature, mucous membranes, white blood cell and neutrophil counts have ALWAYS remained within normal limits
3. Permission given by the senior clinician

Note: You are still REQUIRED to complete the 5 fecal culture series

**Lowest Level: DIARRHEA that is  $<12$  hours in duration  
(and the animal is otherwise normal)**

- CONFINE TO STALL for 12 hours
- Monitor closely for the signs listed above
- Minimize exposure to personnel  
(gloves and boots recommended)

## RESPIRATORY DISEASE ISOLATION PROTOCOL (Equine)

INFECTIOUS RESPIRATORY DISEASE: fever, abnormal respiratory rate or effort, nasal discharge, coughing, enlarged lymph nodes

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**HORSES WITH RESPIRATORY DISEASE SHOULD GO IMMEDIATELY TO THE ISOLATION UNIT AND REMAIN THERE UNLESS MEETS LOWEST LEVEL CRITERIA**  
-----

### **Highest Level: STRANGLES (*Streptococcus equi*) suspected**

1. Purulent exudate draining from lymph nodes
  2. Enlarged painful lymph nodes
  3. Fever and loss of appetite
- 
- Full isolation procedures required
  - Confined to stall
  - Culture of exudates required

Only **RELEASED** to go home

### **Intermediate Level: VIRAL agent suspected**

1. High fever (T>104 °F)
  2. Loss of appetite
  3. Leukogram abnormalities
- 
- Full isolation procedures required
  - Confined to stall
  - Nasal swab for viral PCR

Only **RELEASED** to go home

### **Lowest Level: BACTERIAL agent (not *S. equi*) suspected**

- Can remain in hospital, but RESTRICT movement
- Minimize cross-contamination

## NEUROLOGIC DISEASE ISOLATION PROTOCOL (Equine)

**HORSES WITH ANY RISK OF NEUROLOGIC DISEASE CAUSED BY EHV-1 SHOULD GO IMMEDIATELY TO THE ISOLATION UNIT AND REMAIN THERE UNTIL CRITERIA TO RULE OUT EHV-1 HAVE BEEN MET**

-----

### **High Risk:**

1. Neurologic signs for < 2weeks and has at least one of the following
  - Fever of > 101.5 F in the past 3 days
  - Contact with horses that have had fevers during the last 2 weeks
  - Contact with a horse with neurologic disease within the last 3 days
2. Contact with a horse with known positive case of EHV-1 myeloencephalopathy within the past 3 weeks
3. Contact with a horse diagnosed with neurologic disease (unknown cause) and fever within the last 3 weeks
4. Currently has a temperature of 101.5 F without other obvious explanation for fever
5. Pelvic limb weakness and ataxia and/or cauda equine signs of unknown cause
6. Contact with horses that have had fevers during the last 2 weeks

### **Diagnostics required:**

1. At time of or prior to admission, a nasopharyngeal or nasal swab and purple-top sample will be submitted to the UTVMC Virology lab for EHV-1 PCR.
2. A repeat sample should be submitted in 24-48 hours if the first sample is negative and the horse meets the highest risk criteria above.

### **Management:**

1. Horses positive for EHV-1 will be considered potentially infectious for 21 days following last fever.
2. PCR positive horses will be released from quarantine and available for shipment if a PCR result is negative on samples (nasal) obtained at least 21 days after the end of clinical signs.
3. The state veterinarian should be contacted if there are any positive EHV-1 cases identified.



## IN STALL ISOLATION PROCEDURE (Farm Animal)

### RABIES SUSPECT PROTOCOL

RABIES - The following animals constitute rabies suspects:

- 1) Any animal presented with acute onset of any neurologic disease: signs may include, but are not limited to dysphagia, dementia, or aggressiveness.
- 2) Any animal presented with local or generalized central nervous system or spinal cord signs including, but not limited to weakness, paresis or paralysis of less than 10 days duration.

Only faculty and students, who have completed rabies pre-exposure prophylaxis as recommended by UTCVM, should handle the animal. A disposable mask, gloves, and boots should be worn by all individuals having direct contact with the animal e.g., treating, moving, cleaning etc. The animal should be put in a stall and a sign warning people RABIES SUSPECT placed in a conspicuous location outside of the stall. A limited number of students will be assigned to treat or handle the suspect animal and only those assigned are to have animal contact. The restrictions will be removed if rabies can be eliminated from the list of differential diagnoses. Persons who are properly vaccinated and use good preventive measures should have no hesitation attempting to help any animal. However, remember that if you are exposed to rabies that, in spite of having received pre-exposure rabies prophylaxis that you must also receive post-exposure prophylaxis. Rabies is an uncommon disease, so these precautions will be in effect for more cases than need be, but they will also prevent unnecessary exposure. Careful history and hygienic techniques should be used in any animal; especially where a communicable and/or zoonotic disease is suspected.

### GENERAL GUIDELINES FOR BIOSECURITY AND PERSONAL HYGIENE

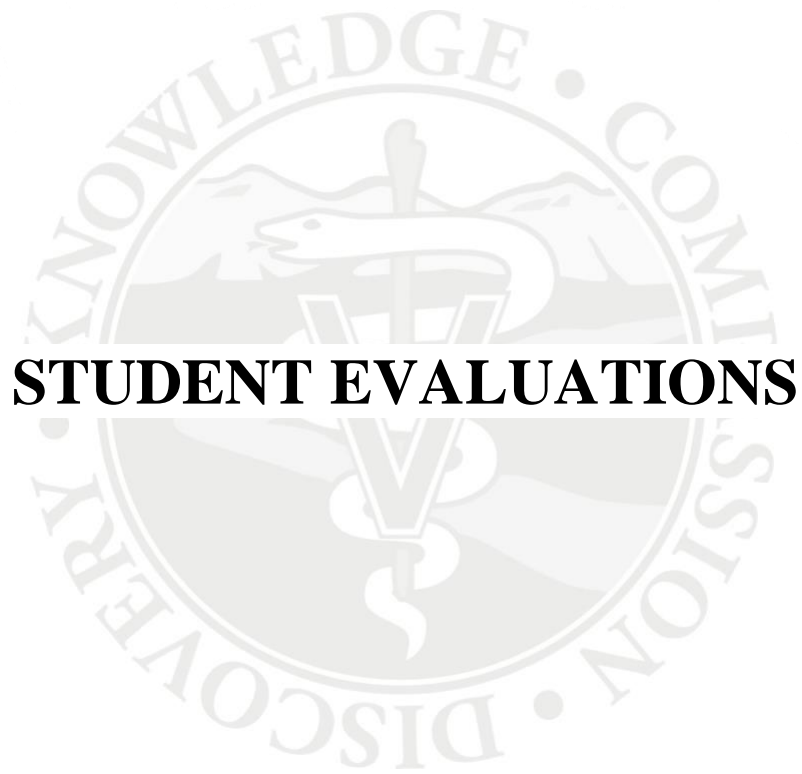
#### A. Hand Washing

- Hands must be washed prior to and after attending to each individual animal and particularly between Field Service calls. In some cases, clean examination gloves may be required by the clinician in charge. Examination gloves are definitely required in isolation areas and when dealing with patients that have suspect zoonotic diseases.
  - Hand hygiene procedure
    - Use of chlorhexidine gluconate/ethanol surgical scrub; routine, isolation, suspect.
    - Hand washing: turning on the faucet, antiseptic soap, rinse, surgical brush, turning off the tap.
    - Clean paper towel to turn on the faucet
    - Wash hands 30 seconds with antiseptic soap
    - Clean under fingernails
    - Rinse hands, dry with paper towel. Use surgical brush if hands are extremely dirty.
    - Turn off tap with paper towel
  - Alternative - chlorhexidine solution 0.5% as above (Use as above if a sink is not available)
- Do not touch patients, clients, yourself, food, cabinet handles, equipment or medical records with soiled hands or gloves
- Rectal palpation sleeves must be changed between animals in all cases

#### B. Other Security Measures

- Personal belongings
  - Personal belongings that are not used on a specific service should be left in a locker

- Reference texts should be left in the records or rounds rooms when working in the clinic
  - Phones and small manuals may be carried into clinic areas but must be cleaned if contaminated.
- Personal Animals: Animals should **NOT** be kept in the large animal clinic or in the rounds room for any length of time. This includes on overnight rotations.
- Food and Drink: Food must not be stored or consumed in any part of the large animal Veterinary Teaching Hospital where animals are housed, treated or examined. There is no eating or drinking in the large animal facility except from water fountains provided.



# **STUDENT EVALUATIONS**

**THE UNIVERSITY OF TENNESSEE  
COLLEGE OF VETERINARY MEDICINE  
4<sup>th</sup> YEAR CLINICAL GRADING POLICY**

1. Students are required to satisfactorily complete each rotation with a grade of 70% or better
1. For compelling reasons, such as illness, the Dean, at his discretion, may permit a student to repeat an examination or rotation
3. Unapproved and unexcused absences may result in a failing or incomplete grade for the rotation. Approval for a planned absence must be obtained ahead of time in writing from the clinician(s) in charge of all involved rotations, the night or weekend duty clinician when applicable, and the Department Head. Approval forms may be obtained from the Departmental Office, completed by the student, signed by the student and clinician(s) and submitted to the Department Head for approval at least 7 days prior to the absence. Requests to miss several days to attend approved veterinary meetings, for job interviews, or take veterinary board exams must be submitted at least 30 days in advance. Any absence may be required to be made up at the discretion of the clinician in charge of the rotation. This includes absences for any reason such as illness, meetings, board exams, etc. Students assigned to Emergency Clinic duty are held totally responsible for that duty and must make advanced plans for the duty to be properly covered. An emergency absence is to be explained upon return to duty. No student is to leave duty or rotation assignments without notifying the clinician in charge.
4. In case of illness, the student must notify the clinician in charge of the service very early on the day of absence.
5. Students are expected to perform in a professional manner at all times. They will be evaluated on professionalism within the clinical grading rubric.

PLEASE REFER TO THE END OF THE HANDBOOK FOR A COPY OF THE CLINICAL  
COMPETENCY ASSESSMENT GRADING FORM  
(Appendix II)

## **CRITERIA FOR FAILING LARGE ANIMAL CLINICAL ROTATIONS**

1. First Tier (Serious) Infractions\*
  - a. Not physically reporting for daytime or emergency assigned clinical duties or not arranging for a proper substitute
  - b. Initiating changes in treatment, nursing care, physical therapy or other aspects of patient care without the attending clinician's authorization
  - c. Falsifying a medical record
  - d. Failure to carry out treatments and provide adequate care of patients or make proper arrangements for treatments and care.
  - e. Unapproved absences
  - f. Excessive tardiness or failure to attend rounds or be available for clinic duty
  - g. Failure to achieve a passing grade in the category of professionalism
2. Second Tier (Less Serious) Infractions\*\*
  - a. Not having SOAP or medical records completed in a timely fashion per clinicians criteria
  - b. Failure to meet dress code and not having proper equipment available, including during weekend and night duty
  - c. Unable to correctly answer questions regarding patients under primary care of the student
  - d. Violation of isolation protocols

\*First Tier Infractions will result in immediate reprimand and failure of the rotation. The student may appeal the reprimand by meeting with the faculty member in charge of the rotation and stating his/her case. The faculty member will make a decision regarding the validity of their explanation and the student will be informed regarding the faculty members decision. The Associate Dean of Students and the Department Head will also attend the initial appeals meeting.

\*\*Initial Second Tier Infractions will result in a warning, and the second offense will result in a reprimand and a drop of two (2) letter grades. The student may appeal as above for the First Tier Infractions.

## **STUDENT EVALUATION OF CLINICAL INSTRUCTORS AND CLINIC ROTATIONS**

The clinical faculty of the Department of Large Animal Clinical Sciences values your evaluations. Your comments are used to make each instructor a better teacher and each block a better learning experience.

Each student will be responsible for completing an evaluation form using the computer program One45. The clinical instructors will not see these evaluations until the grades are given.

An example of the evaluation form follows:

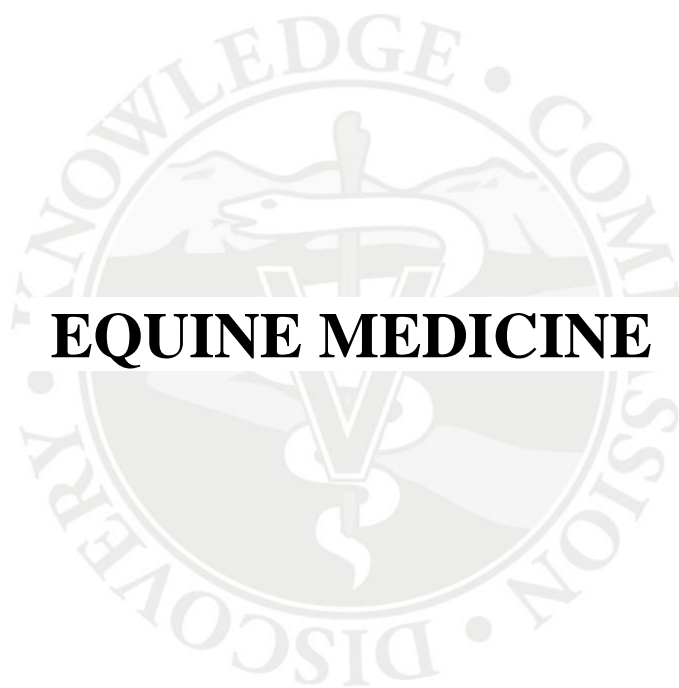
### **UT COLLEGE OF VETERINARY MEDICINE CLINICAL INSTRUCTOR ROTATION EVALUATION BY STUDENTS**

1. Responsibilities and grading policy were clearly outlined by the instructor at the beginning of the rotation.
2. Experiences during this rotation enhanced my knowledge and/or technical skills.
3. The instructor actively involved me in clinical cases and patient management.
4. The instructor challenged me to solve problems and to explain my decisions.
5. The instructor behaved professionally in leading this rotation.
6. The instructor structured the rotation so that I received useful, ongoing feedback.
7. Overall, the instructor provided a positive learning experience during this rotation.

\*\*All are evaluated on a 1 (strongly disagree) to 5 (strongly agree) point scale

Comments regarding clinical instructor:

Comments regarding rotation:



# **EQUINE MEDICINE**

## EQUINE MEDICINE

### GENERAL INFORMATION

- Each rotation will include at least one clinician, one intern/resident, and senior students
- You should be familiar with all equine medicine cases in the clinic
- Please notify the senior clinician in your group if you are to be absent at any time

### SCHEDULE

#### Hours of duty

- Weekdays: 7:00am to 8:00pm (earlier or later if work is not finished)
- Weekends and Holidays: 7:00am until work is finished; students must check with the clinician or house officer on duty before leaving on a weekend or holiday morning
- Emergency duty as scheduled (1-2 shifts per weekend)
- Medicine outpatient appointments will be scheduled Monday through Friday starting at 10:00am

#### Rounds:

- Weekday mornings: 9:00 am in the large rounds room next to the records room. This may change depending on the clinician on duty (e.g. earlier or later depending on cases, emergencies, meetings, etc.)
- Evenings: 6:00pm ward rounds for transfer to the ECC rotation
- Thursday: 8:00am Grand Rounds in LACS classroom (please refer to page 6 for the Grand Rounds schedule)
- Weekend and holiday mornings: 8:30am ward rounds for presentation to daytime emergency students and clinicians
- Afternoon rounds may be called during the week at the discretion of the primary medicine clinician on duty

#### Senior students must complete the following tasks before 9:00 AM (8:00 AM on Thursdays):

- Perform a complete physical examination on each of your patients
- Administer the required morning treatments
- Prepare new ICU sheets and clinicians orders and have them in place by the stall
- Record, at minimum, your subjective and objective observations in the medical record

### FIRST/LAST DAY OF ROTATION

On the first day of your rotation, the previously assigned student will have TPR'ed and treated your new cases before going to their next assignment. A SOAP should also be entered into the medical record for that day.

On the last day of your equine medicine rotation, you are expected to TPR and enter the SOAP in the medical record for your case before you go to the next block.



## ASSIGNMENTS AND RECORDS

The student assigned to each case will have the plastic chart holder identified with a label and maintained in an organized fashion. Records are to be kept in detail and up to the minute! Your legal signature (in black/blue ink or electronic) must accompany each entry. Records are legal documents that are open only to students and instructors. As far as communication with the owner is concerned, you should only discuss a case with the owner as the clinician has authorized you. This refers to personal as well as phone conversations. Students are not authorized to call clients unless directed to do so by a clinician. No information about the case should be discussed with anybody from outside the hospital unless authorized by the primary clinician. All communication should be documented in the computerized record (no inappropriate comments in the record).

Outpatients will be assigned to one senior who is responsible to work with that patient until it is sent home or put in a stall. When taking the history, always ask if the animal is insured. If it is, it is the responsibility of the owner to notify the company of injury, illness, or surgery required. Be sure to confirm with the owner that all the contact information we have for them is correct.

All seniors on the medicine service are expected to participate and observe the diagnosing and handling of outpatients unless working directly with another instructor on another outpatient or an inpatient which must be cared for at that time (emergency). Do routine work later.

Inpatients are also assigned to one senior student. If an animal is dangerous or has idiosyncrasies, put a sign on the stall door and the escape door. Each student will see that his/her patients are put in a clean stall. Send home blankets, leg wraps, lead shank, etc. with the client. Keep the halter with the horse. Any equipment left with the horse should be labeled with the owner's information so that it does not get lost. Students will help each other in examination, care, and treatment of patients. The student is to perform a physical examination, decide on laboratory tests needed, list the tentative diagnoses on the history sheet in the space provided, and decide on a course of therapy. Oral examinations with a speculum, rectal examination, intravenous injection, placement of catheters, passing of stomach tubes and other special procedures will be done after consulting with the senior clinician or resident and under his/her direct visual supervision.

All patients should be weighed when they are admitted to the clinic and the weight recorded in the blank on the history sheet. They should be weighed at least weekly there-after and the weight recorded in the daily write-up unless it is unsafe to move them. They should also be weighed at the time they are discharged. Record this weight on the front page below the original weight with the date.

Before any other laboratory test is requested, any treatment is given, or any surgical procedure is performed, the clinician in charge of the case must be consulted. Do not change treatment of a patient without consulting a clinician. Clinician's telephone numbers are available at the Large Animal Office and the Front Desk.

Write observations and medications in the chart immediately when they are observed or given. Sign your name or initial each entry. Record the time on the chart as well as the date. All writings must be done in ink. The chart should always be in the chart rack in ICU or in the records room.

## **PAPERWORK**

The following forms are required for an out-patient or an in-patient:

- History form
- Physical exam form
- Case summary form
- Daily charge sheets
- Discharge instructions (computerized for all cases – excluding Coggins and Health Certificates)

\*\*Short stay forms are only to be used in equine medicine for routine procedures such as Coggins, health certificates, and vaccinations

## **SAMPLE SUBMISSION**

Many samples obtained for cases in large animal medicine are sent to outside laboratories. If a sample from a patient needs to be shipped, consult with the medicine technician or clinician on the case to determine appropriate laboratory for submission. All forms need to be filled out by the clinician or student responsible for the case. Shipments are sent by 2:00pm each day. All paperwork and samples must be delivered to the appropriate laboratory prior to 2:00pm so that shipment is not delayed.

## **GRADING**

The grading policy for equine medicine will follow the general guidelines adopted by the College of Veterinary Medicine Faculty, as outlined earlier in this handbook. Seniors are evaluated individually by each instructor with input from the resident and technician on that service. If the student does not receive a passing grade from an instructor he/she will receive an incomplete and must make up the rotation at a later time.

Student grades will be based on his or her professional knowledge, professional judgment, initiative and dependability, client relations, technical skills, medical record keeping, and performance on the end-of-rotation written quiz. The components of the grade will be as follows:

- |    |   |     |
|----|---|-----|
| 1. | Clinical performance and participation (includes Grand Rounds): | 75% |
| 2. | Written end-of-rotation quiz:                                   | 25% |

### **AREAS TO REVIEW FOR EQUINE MEDICINE ROTATION (sample only)**

1. Important respiratory viruses of horses, the different groups of each (i.e., the 5 equine herpes viruses), and the diseases they cause
2. What tests are on a large animal chemistry panel and what elevations (or deficiencies) in each mean)
3. Cause, treatment, and prevention of:
  - a. Tetanus/Botulism
  - b. Neonatal septicemia in foals
  - c. RAO
  - d. Pleuropneumonia
  - e. Anterior enteritis
  - f. Colitis
  - g. Enterolithiasis
  - h. Ileal impactions
4. Pathophysiology, clinical signs, and treatment of equine Cushing's Disease and EMS and how they differ
5. Mechanism of action of antibiotics used in equine practice
6. Retroviral infections of horses
7. Examination and laboratory tests for newborn foals
8. Tests for passive transfer of immunoglobulin in horses
9. Guttural pouch mycosis, empyema, and tympany: organism, clinical signs, treatment
10. Causes of diarrhea in adult horses
11. Pathophysiology, clinical signs, epidemiology, and treatment of PHF, EPM, and EIA
12. What is hypertonic saline used for?
13. What laboratory findings in horses would suggest:
  - a. Regenerative anemia
  - b. Non-regenerative anemia
14. How much colostrum does a foal need in the first 24 hours of life?
15. How much milk does a normal foal consume each day?
16. Name the lung worms of horses and how they are transmitted
17. Differential diagnoses for facial nerve paralysis in the horse
18. Differential diagnoses for epistaxis in the horse

## HOW TO WRITE SOAPS IN EQUINE MEDICINE

### **S: Subjective**

- Patient profile
- History
- Chief complaint by owner
- How is animal?
- Attitude of animal (BAR, lethargic, depressed, dull, comatose, excited)
- Changes that occur daily (painful, excited)
- Urination/deification, diarrhea, vomiting (normal appearance, volume, consistency)
- Appetite
- Misc.: ambulatory, in ICU, basic description of wound site, description of bandage sites, stable/critical, hydration status and fluids

### **O: Objective**

- TPR
- Mucous membrane color
- CRT
- Radiology findings
- Values for abnormal blood work
- Problem list
  - Heart
  - Lungs (sounds, quality)
  - Pulses (strong, weak, bounding PVC, what % of time)
  - Ears, eyes, nose and throat (head region)
  - Abdomen: masses, palpable, painful, incision
  - Peripheral lymph nodes (important even if they are within normal limits)
  - Musculoskeletal
  - Neurological status
  - Integumentary

### **A: Assessment**

- Differentials for each problem
- Etiology
- Incidence
- Pathogenesis
- Necropsy
- Discussion stuff goes here

### **P: Plan**

- Treatment plan
- Diagnostic plan
- Summarize what drugs, fluids, etc. they are on
- What are you monitoring for?
- Client education



**FARM ANIMAL MEDICINE  
AND SURGERY**

## **FARM ANIMAL MEDICINE AND SURGERY**

The Farm Animal Clinic is a multi-species clinic and including cattle, sheep, goats, pigs, camelids and occasionally exotic animals. During your three week rotation in the Farm Animal Clinic, all attempts will be made to expose you to a wide range of medical and surgical conditions pertaining to the species listed.

### **CLINICAL TEACHING IN FARM ANIMAL MEDICINE**

Clinical teaching is based on three time related actions.

1. Diagnostic: the student must discover what the problem is including its manifestations
  - a. Establishment of a minimum database
    - i. gathering historical data by means of a client interview
    - ii. assessment of any records where available
    - iii. the gathering of current data (complete physical examination, baseline lab tests including making of a blood smear, a urinalysis, fecal analysis)
  - b. Development of a master problem list (a summary of abnormal findings)
  - c. Generation of a list of differential diagnoses
  - d. Selection of special examinations or procedures
  - e. Assessment of the most likely diagnosis by interpretation of the results of the special examinations or procedures
  - f. Establishment of a prognosis based on the diagnosis, the minimum database and the special examinations and procedures
2. Therapeutic
  - a. Symptomatic: includes elimination of stress, pain, discomfort or life or organ threatening situations
  - b. Specific therapeutic action which includes removal of causative agents
  - c. Supportive therapeutic action: improving the rate or chances of recovery
3. Preventative: the problem should be seen as it relates to a herd basis.
  - a. Prevention of complications
  - b. Prevention of recurrence
  - c. Prevention of horizontal or vertical spread
  - d. Monitoring of other animals at risk
  - e. Client counseling.

### **ADDITIONAL INSTRUCTIONS FOR CARE OF FARM ANIMALS IN THE CLINIC**

1. Handling - Large animals should always be handled with a healthy respect, as they can be dangerous, either intentionally or accidentally. Students should never attempt to restrain cattle without assistance. The technician and/or the clinician in charge of the case should assist with cattle restraint at all times, especially when putting an animal in the swing around and chutes.
2. Isolation - We do not have an isolation area in the food animal clinic. If isolation seems to be indicated, we place the animal in an end stall and do not place another animal of the same species next to it. For calves and other small species, an isolation area exists at the end of the small ruminant ward. Foot baths are placed outside the gate for use by all that have to take care of these animals that are contagious. Gowns, plastic shoe covers, and exam gloves should also be used when entering these stalls. These items should be removed upon leaving the stall and left at the stall. The student must wash hands before handling other animals (see isolation protocols).
3. Milking - Students are responsible for milking of client dairy cows. This is at least a twice a day job every day of the week. Anyone caught skipping this chore can expect an automatic failure for this rotation. Our technician will assist with or check to make sure this has been done.
  - a. The milking must be done early in the morning and as late as possible in the afternoon. It is preferable that milking be spaced 10-12 hours apart.
  - b. You will be instructed by the technician, clinician, or resident on the technique.

- c. On the morning of the last day of your rotation, you must do the milking in order for continuity to occur. The new group will then be instructed regarding the afternoon milking.
- d. None of the milk is to be used for human consumption or removed from the clinic.
- e. When lactating animals are in the clinic, they are checked daily with the CMT and their milk output is weighed. This is entered into the records.

When a new case is presented, the responsible student should receive the client and obtain a full history and thereafter assist the client with unloading the animal and placing it in an appropriate stall or treatment area. Help to off-load animals should be obtained in cases where such animals are wild. Make sure that all the appropriate gates are shut, particularly the outside gate in the loading area. If you are unsure of the handling or restraint of an animal, please call the veterinary technician or the clinician in charge. In the case of cattle, the stalls nearest the outside door are used in preference. If an animal is presented as an out-patient, it can be placed in the roundabout or in the green chute for immediate attention. Always make sure that your actions and plans are known and understood by the technician, resident, and/or clinician on duty.

Students on the farm animal rotation typically conduct a majority of the client communication on hospitalized patients. Students should avoid discussing finances with clients and should refer these questions or any other concerns to the clinician in charge of the case.

Not all animals within the farm animal clinic will receive daily monitoring of vital parameters. This is dependent on the temperament of the animal. Beef cattle should not be handled without the assistance of a technician, resident, or clinician. Morning assessment of these patients can include the following: appetite, rumination, the nature of the feces, and any abnormal clinical signs. Dairy cattle that require daily milking should be assessed as early as possible and the milking procedure completed prior to rounds.

## **PAPERWORK**

The following forms are required for an out-patient:

- Short stay form
- Residue avoidance form (except for camelids)
- Charge sheet

When animals stay over-night the following forms are applicable:

- History form
- Physical exam form
- Case summary form
- Residue avoidance form
- Daily charge sheets
- Discharge instructions

## **FARM VISITS**

A one day farm visit (as time permits) is scheduled during the rotation. The purpose of which is to give the students the opportunity to become more familiar with lameness and foot trimming procedures in cattle. For the purpose of this visit, a pair of protective gloves and weather appropriate clothing are recommended.

## **GRADING**

The grading policy for farm animal medicine and surgery will follow the general guidelines adopted by the College of Veterinary Medicine Faculty, as outlined earlier in this handbook.

We are happy to have you with us and we hope that you will find your rotation in the Farm Animal Clinic both interesting and rewarding.

### **AREAS TO REVIEW FOR FARM ANIMAL MEDICINE AND SURGERY ROTATION**

1. Important respiratory viruses of cattle and the diseases they cause
2. The bacteria involved in bovine respiratory disease complex pathophysiology, and antibiotic treatments
3. What tests are on a large animal chemistry panel and what elevations (or deficiencies) in each mean)
4. Cause, treatment, and prevention of:
  - a. Milk fever and ketosis in cattle
  - b. Calfhood diarrhea (differential based on clinical signs and age of calf)
  - c. Trichostrongylosis in small ruminants
  - d. Parelaphostrongylus infection in llamas
  - e. Tetanus
5. Mechanism of action of antibiotics used in farm animal practice and which can be used in food animals
6. Retrovirus infection of cattle, sheep, and goats
7. Region blocks for dehorning, enucleation, and flank laparotomy in cattle.
8. Treatment and cause of foot rot, hairy heel wart, and interdigital dermatitis in cattle and foot rot in sheep
9. Urolithiasis in cattle and small ruminants
10. Classification of mastitis in cattle, how to prevent and treat them, bacteria involved
11. Tests for passive transfer of immunoglobulin cattle
12. What is a papple shaped abdomen on a cow? What abdominal conditions are associated with a papple abdomen?
13. List the forestomach diseases of cattle and the ping distribution associated with each
14. What is vagal indigestion and how do you treat it?
15. How would you treat:
  - a. Wooden tongue
  - b. Lumpy jaw
  - c. Calf diphtheria
  - d. Shipping fever (in cattle)
16. What is hypertonic saline used for?
17. Causes and treatment of clinical and subclinical rumen acidosis
18. Physiology of primary and secondary rumen contraction. Eructation?
19. Differential diagnosis of:
  - a. Erosive lesions on cow teats
  - b. Oral ulcers in cattle
  - c. Neonatal calf diarrhea
20. What is orf and how is it prevented?
21. How much:
  - a. Colostrum do you give a newborn calf?
  - b. Does a cow eat a day as % of body weight?
22. Name the lung worms of:
  - a. Calves





# **FIELD SERVICES**

## FIELD SERVICES ROTATION

The Field Services rotation is designed to introduce you to the practice of veterinary medicine using actual case animals on the farm. Your duty is to assist the senior clinician, resident, or intern. The amount of leeway given to you to perform various procedures will depend on the clinician involved and your ability to perform the procedure. This information will be discussed in the truck before arriving on the farm. Naturally, variation will occur regarding the degree of student participation and will be dependent on the clinician involved.

### Objectives of Field Service Rotation

The Field Services rotation is designed to introduce the student to the practice of veterinary medicine using actual case animals on the farm. The student's overall duty is assisting the senior clinician, resident, or intern. The amount of leeway given to a student, in performing various procedures, will depend on the clinician involved and the ability of the student to perform the procedure. This information will be discussed in the vehicle before arriving on the farm. Naturally, variation will occur regarding the degree of student participation and will be dependent on the clinician involved.

The following objectives should be achieved during the Field Services rotation:

1. Perform routine procedures on client animals at the discretion of the clinicians.
2. Communicate with clients regarding findings, treatments, prognoses and follow-ups at the discretion of the clinicians.
3. Be responsible for entering and submitting laboratory data and following-up on cases with the help of clinicians, residents, interns, or technicians in order to arrive at a diagnosis.
4. Learn, perform, or discuss common procedures conducted during Field Service calls.
5. Be able to logically work through problems likely encountered in practice.
6. Contribute logically to discussions focused on diagnoses and treatments of various conditions.
7. Develop an understanding of the economic value of livestock and charges for services rendered to clients.

### Dress code

For equine, you will need to wear khakis (no skinny pants), solid scrub top, boots, and have a spare set of clothes just in case. The food animal students need to wear a solid scrub top with khaki work pants and bring coveralls and rubber boots with them every day. If you don't have rubber boots, find some or you will not be permitted on the farms. **This is a matter of biosecurity.**

It is also important to watch the weather. We go out on calls often regardless of the weather. So have the appropriate clothing to fit the weather. Appropriate cold weather clothing includes gloves, boots, wool socks, and some kind of hat. Appropriate professional clothing should be worn under the coveralls for re-entering the school or stops along the way. Boots, coats, extra coveralls etc... should be stored in lockers provided in the Field Services locker rooms. **Please keep in mind the limited space on the trucks.**

### **Being prepared for extremes in weather is advantageous; bringing your entire wardrobe is not.**

After finishing on a farm, you will need to clean your boots and clothing as much as possible, to try and prevent the spread of disease between farms. Once you get back from the farm call, you also need to conduct additional cleaning in the FS building either inside or outside. A boot wash station and hose are located on the exterior wall by the garage doors. *Boots should be stored on the boot rack located in the wash bay adjacent to the truck parking to dry.* **Boots**

should **NOT** be placed on the boot rack if they are still covered in mud/manure. Muddy boots are not permitted in the office area of Field Service or anywhere else in the clinic.

All students should have their finger nails clipped short. **If nails are not clipped short, you will not be allowed to perform trans-rectal palpation of cows or horses.**

### **Field Services Schedule**

Each student on the Field Services rotation will spend 2 weeks on Farm Animal and 2 weeks on Equine. On the first day of the rotation, all students are required to attend the orientation at 8:00 am (usually the first Monday morning unless that Monday is a holiday and then orientation will be on the first Tuesday).

Please come prepared to leave for farm visits immediately following orientation. Students will be assigned emergency duty coverage for field services. Occasionally you may be assigned in-house duties as well. These are discussed in the ECC section and details will be covered during orientation. Please respond within 5 minutes of receiving a call. Also, be available at the school within 20 minutes of receiving a Field Services call.

Occasionally we will leave early for farm visits. Please review the appointment database for Field Services and visit with the clinician regarding the upcoming activities. **Note the activities scheduled for the next day and spend some time studying procedures to be performed as well as drugs, vaccines etc... to be used before reporting on the following day.** The trucks will leave promptly at the times listed and you may be left if you are not present. If there are no appointments scheduled in the Field Services database please be present at the Field Services area in the UT Veterinary Medical Center at 8:30 AM (unless instructed otherwise). The time of return to the UT Veterinary Medical Center is variable and depends on the case load and type of work performed. Be prepared to stay late on occasion as we may be back as early as 4:00 PM or as late as 8:00 or 9:00 PM.

Many farm calls take us to areas with no food service or food facilities. Students may want to bring their lunch.

There may be periods when the case load is relatively light and free time is available during the week. Do not waste this time. Instead, use this time wisely to check laboratory results on cases seen previously or familiarize yourself with all topics listed on the website. **Show initiative by anticipating and preparing for what is likely needed on future calls both materially and mentally.** This may involve reading about or researching a pending case, obtaining instruments and materials for the next case and preparing the trucks. If there are no pending cases, research or read about cases observed previously. Time spent in the truck is valuable for case and topic discussions. Sleeping, inappropriate use of smart phones or other mobile devices, and tobacco are not permitted. Do not use the UT Veterinary Medical Center reception area as a meeting or conversation area due to restricted space for clients and excessive noise.

### **Emergency duty responsibilities**

While on Field Services, students must fulfill emergency responsibilities. Students must:

- Respond to an emergency call via phone or text
- Arrive at the clinic within the allotted period of time (20 minutes)
- Communicate effectively to the clinician when replying to a call
- Dress according to dress code standards for an emergency
- Make the clinician aware of changes to the emergency schedule
- Make sure phone number is on the emergency schedule

- Put phone number on the board in the clinician's room and make sure the front desk has your phone number. Failure to follow these guidelines will result in consequences determined by the clinicians on duty (e.g., extra ER shifts, white papers, failure of the rotation, etc.)

Weekday shift times are 4 PM-8 AM. Weekend and holiday shift times are 4am-4pm and 4 PM-4 AM. Understand that these are emergency situations, and shift times are not exact. Therefore, be prepared to be called in *earlier* or stay out *later* than the 4 to 4 window. If students live farther than 20 min from campus, make arrangements to stay closer during shift duties.

Part of the learning experience for emergencies is gathering things from the garage that may not already be on our truck that could help in diagnosis or treatment of our patient. Be there to help with that process as well. A veterinarian is most valued by their client during their greatest time of need, an emergency. Be compassionate to that through professionalism, enthusiasm and punctuality.

### **Grades**

A Field Services grade will be given to each student at the end of the rotation. This grade is based on 80% clinical performance and 20% final exam. The clinical performance evaluation is done using the One45 system. The final exam format is dependent on your clinician.

### **Clients**

The Field Services rotation usually involves working on client animals on client owned premises. This aspect is much different from working on privately owned animals in the clinic since on Field Services the owner or manager is usually present, observing every move made and hearing all comments.

**Therefore, exceptional professional behavior is required at all times.** Thoughts should be filtered before speaking so as to not unduly alarm the client of certain aspects of the physical examination or treatment. Also, no profanity or "offhand" comments should be used during the treatment of animals. All premises and property should be treated with respect at all times. Any gate that is opened should be closed after going through regardless of how much time will be spent on the other side. The negative aspects of the case can be discussed in the truck after leaving the premises. **Keep in mind that students will usually be quizzed on the farm about physical exam findings, diagnostic and treatment protocols.** Therefore, prepare yourself to answer these questions as you conduct your physical examination. Also, students will often be asked to explain their findings and therapeutic plans to clients.

Clients can be categorized into three basic groups. (1) Private owners which make up most of the Equine Field Services caseload and a considerable amount of cases for Farm Animal Field Services. These clients usually reside within a 40 miles of the UT Veterinary Medical Center. (2) University of Tennessee Research and Education Centers account for a significant amount of the farm animal caseload. The stations we provide service for are:

- UT Blount Farm - beef cattle, sheep
- UT Plateau Farm - beef cattle
- UT Holston Farm - beef cattle
- Middle Tennessee Experiment Station - dairy and beef cattle, UT Bull Test
- State Prison Farms - Bledsoe County Regional Correctional Facility (dairy) is routinely visited

### **Restocking Trucks, Cleaning and Lab Work Submission**

Following completion of farm calls, all items used should be thoroughly cleaned and returned to their proper place on the truck before leaving the farm. If you are unsure where an item goes, ask the clinician or place it on the driver's seat (except trocars)!! Do not replace an item if you are not sure where it goes, even though it seems logical that's where it should go. Also, after completing a call, boots and hands should be washed with a disinfectant before leaving the premises. At each location, mental or written

notes should be kept of drugs and items used for restocking purposes. If coveralls are dirty, they should be changed before going to another call.

Restocking and cleaning the trucks, as well as lab work submissions are the first priorities upon returning to the clinic. **MAKE SURE THE TRUCK GETS PLUGGED IN UPON RETURNING FROM A CALL.** The refrigerators will pull down the battery and the medications in the refrigerator will have to be discarded if this occurs- which can be VERY expensive. Drugs and materials used should be restocked in their proper locations. If the proper location is unknown, ask the clinician or place items on the driver's seat. All trash should be removed from trucks. Water tank should be filled and all personal items, trash and excessive mud and manure removed from inside the cab. A clean, well-stocked, organized truck is much more desirable to work from for the people responding to the next call than one dirty and poorly stocked. Clients notice organization and cleanliness as well.

Some drugs and supplies may be obtained from the Field Services pharmacy. Before removing any items from this pharmacy, write what you are taking on the board beside the door. This practice will benefit restocking this pharmacy. Items not normally stocked in the field services pharmacy can be obtained from the clinic pharmacy or the clinic. Pharmacy requests must be made via the computer system. Ask a clinician, resident, or intern to assist you if supplies from pharmacy are needed. For items in the clinic, locate one of the technicians for assistance so they can keep track of their inventory.

All lab work must be ordered upon returning to the clinic and samples delivered to the right location. Remember that some orders like “biopsy/histopath” require an additional signature from the clinician before it is accepted by the lab. In addition, downloading images from our radiograph or ultrasound units must be done at this time.

Please help maintain the Field Services area(s) of the UT Veterinary Medical Center (garage space, storage facilities, rounds room, clinician room, and locker rooms/restrooms) in a clean and orderly condition. You will be assigned a locker at the beginning of the Field Services rotation and you are expected to maintain the locker in a professional manner. You are expected to clean the locker out by the last Friday of the Field Services rotation/block. Any items left in the locker the following Monday will be removed and stored for at least one additional rotation/block. Subsequently all items may be discarded.

### **Absences**

The unexcused absence policy is 0 days. Requests will be dealt with on an individual basis, as well as makeup work. For scheduled leave days such as state board examinations, interviews, etc..., forms are available in the Large Animal Clinical Sciences office. They must be completed by the applying student and signed by a Field Services clinician. If you are going to be absent please make the appropriate arrangements with your classmates so emergency duties/services are covered at all times. Failure to make these arrangements will result in immediate failure of the rotation. Finally, **if sick, call the appropriate Field Services clinician as early as possible so this clinician is not kept waiting expecting a student.**



**EQUINE SURGERY, LAMENESS AND  
REHABILITATION**

## **VMC823 Fourth Year Equine Surgery, Lameness, and Rehabilitation (ESLR) Selective**

Length of selective – 2 weeks

### Description:

This rotation is designed to expose the student to all aspects of Equine Surgery, Lameness, Performance Medicine and Rehabilitation. This will be accomplished by the student's involvement in simple to advanced lameness diagnosis, advanced orthopedic and soft tissue surgery, podiatry and rehabilitation of the equine. This includes the utilization of advanced surgical equipment, diagnostic equipment (Lameness Locator, Dynamic Video Endoscopy and Ultrasonography) and rehabilitation equipment (underwater treadmill, hyperbaric oxygen, cold saltwater therapy, therapeutic laser and ultrasound). Students will be involved with outpatients, inpatients, podiatry cases as time permits. They will additionally be exposed to complimentary therapies including chiropractic and acupuncture. Students will be responsible for inpatient care under the supervision of the faculty. Weekend duties include all aspects of patient care as occurs with other large animal hospital rotations, as well as assisting on the Emergency and Critical Care Service. Clinical work will be supplemented with in-depth rounds that discuss clinical cases and the fundamentals of surgery principles, lameness diagnosis, and equine rehabilitation.

### Goals:

1. To provide state of the art as well as practical surgical instruction.
2. To teach senior students' theories and techniques in general surgery, with a focus on equine.
3. To provide consultation services to other areas of Large Animal Clinical Sciences.
4. To provide information and consultation to private practitioners.
5. To develop an understanding of the principles and techniques of equine surgery including:
  - a. Field surgery
  - b. Emergency surgery
  - c. Perioperative patient management
  - d. Sound surgical techniques
  - e. Pathophysiology involving the surgical procedure/condition
6. Understand diagnostic methods for various equine musculoskeletal injuries.
7. Monitor a case for improvement and understand when and what changes to make to a rehab protocol based on progress.
8. Formulate a rehabilitation protocol for a patient.
9. Understand what treatment modalities are best for different types of injuries.
10. Understand how to plan a re-conditioning schedule for a patient at home, once they are able to leave the rehab center.
11. Know prognosis for return to function for various injuries with various treatment protocols.

### Expectations, duties and obligations:

Student will be responsible for the care of the patients on the Equine Surgery, Lameness and Rehabilitation Service seven days per week. Patients will be housed in both Main Hospital (typically B ward with overflow into C ward) and the Equine Performance and Rehabilitation Center. Students are expected to actively participate in workup of daily cases, assist in surgery, perform rehabilitation activities, and any other treatments that patients may require. Weekend duties include performing physical exams on patients, attending 8:30 am rounds and performing any required treatments on their cases. Additionally, they will enter into the Emergency and Critical Care service on Saturdays and Sundays along with the Equine Medicine Students and

Farm Animal Medicine and Surgery Students. They will be involved in managing cases that come into the podiatry center and provide follow-up care on the farm by accompanying faculty.

Schedule:

M - TH: 9:30-5, F 9:30-12 - Receiving

M - F: Podiatry as available

M - F: 9- 10:00 am Stall Rounds- inpatient updates and daily planning

Friday: 1-3 pm Sit Down Rounds, Case presentations

Sat & Sun: Inpatient care, 8:30 am Emergency Rounds, Emergency and Critical Care Service

Grading:

Grading is based on the current University of Tennessee Grading System. Students will be evaluated on the basis of their performance as well as either an online exam, case report or topic presentation. Any online exams, case reports or presentations will count as 30% of their grade.

### **SKILLS/KNOWLEDGE REQUIRED**

#### **Before the Rotation (From VMP840 Large Animal Musculoskeletal and VMP835 Principles of Surgery)**

Physical exam Conformation

Gait

Lameness exam basics Regional analgesia landmarks

Aseptic technique- prep, open gloving, gowning/closed gloving Surgical instrumentation

Proper instrument and hand ties Suture material and patterns

#### **During the Rotation**

Obtain a complete but concise history

Perform general physical exam and musculoskeletal exam Assist with lameness exam and flexions

Perform diagnostic analgesia (palmar/plantar digital, abaxial sesamoid, low 4 point)

Demonstrate aseptic technique- prep, open gloving, gowning/closed gloving

Assist/perform therapeutic rehabilitation treatments (laser TX ultrasound, PEMF,etc)

Assist/perform therapeutic exercise treatments (UWTM, Equicore, balance pads, etc)

Assist/perform preparation of the surgical patient

Assist in surgical procedures Assist/perform diagnostic imaging

#### **Opportunities for One45 Competency Logs Core Skills**

- Bacterial culture, sample collection

- Bandage, distal limb, Apply

- Blood collection, jugular, cephalic, or facial sinus venipuncture, perform

- Catch, halter, and lead horse at walk, trot; demonstrate safety

- Catheterization, IV, Place

- Catheterization, urinary, male

- Drug administration; IV, IM, SQ, PO

- Fine needle aspirate; Perform

- Hoof examination (front and rear), Perform and clean hoof

- Hoof tester, demonstrate use

- Immobilize limb, apply splint

- Laceration repair, participate

- Lameness evaluation (lameness grading, hoof tester application, and flexion tests), participate



- Lip twitch, apply
- Neurologic examination, complete, perform
- Open wound management, participate
- Orthopedic examination, perform
- Patient history, perform
- Physical Examination, perform
- Sedation, select and administer sedatives
- Suture, skin, perform

### **Global Skills**

- Anesthesia, local block, perform
- Arthrocentesis, participate
- Arthrocentesis, perform
- Bandage, foot, apply
- Biopsy, punch, perform
- Catheterization, over-the-wire, participate
- Endoscopic exam, assist
- Horse shoeing, pull shoe, perform
- Nerve block, palmar/plantar digital, perform
- Nerve block, regional, participate
- Radiographs, P3, navicular series, hocks, stifles, cervical, thorax, interpret
- Sling lift patient, participate
- Surgical procedure, orthopedic, participate
- Surgical procedure, soft tissue, participate
- Staple removal, perform
- Suture removal, perform
- Ultrasound examination, limb, perform
- Others as case appropriate

## **ESLR ROTATION PROTOCOLS**

- **Initial Orientation:** On the first day of the rotation, students will meet in the Large Animal student room at 8:00 a.m. to be given a complete clinic orientation.
- **Rounds:** Short stall rounds will be held every day (at 9am) and on weekends at 8:30am with emergency duty clinicians to assure no problems with in-house cases and to distribute/organize cases coming in on weekends.
- **Formal Presentation:** Each individual should be prepared to present a PowerPoint presentation at the end of the rotation. Topic to be determined after consultation with service clinician
- **Case Assignments:** Students will be allowed to choose their cases as long as the cases are evenly distributed. **STUDENTS SHOULD ALWAYS WORK IN PAIRS! IF ANOTHER STUDENT IS UNAVAILABLE ASK TECHNICIAN, HOUSE OFFICER OR CLINICIAN TO ASSIST.**
- **Patient Care and Case Management:** Students should discuss and decide which cases each student will take the following day to give all students a chance to read up on cases they will be seeing. While students may need to be flexible as to what case they will take as things can change the day of, they are expected to read up on and be prepared for cases including knowledge of potential differential diagnoses and procedures to be performed. This also includes knowledge of relevant anatomy. Students who demonstrate knowledge of a procedure are also more likely to be able to perform more procedures.

When taking in patients, students should take a complete history from the owner (including vaccine history), acquire a weight on the patient, and perform a thorough physical exam. Daily patient care should include grooming and hoof picking in the mornings, as well as once daily changing of PRN/injection ports on any in patients with catheters. All student injections not performed through a catheter must be supervised by a

technician, house officer, or clinician, and must be performed with the needle off of the syringe. No white substance should be injected through a catheter or into a vein. Students are encouraged to ask questions if there is any uncertainty about care or medications.

- Surgery Area Protocol

- The surgical area consists of the following:
  - 3 surgical suites, and prep area: Full surgery attire is required: cap, mask, scrub suit, and clean surgery shoes that are only worn in the primary surgery area (no street shoes, coveralls, boots, etc.).
  - Secondary surgery areas: (Induction and recovery stalls, store rooms, standing surgical suite). These are “clean” areas, scrubs and surgery shoes should be worn but caps and masks are not necessary after the conclusion of surgery.
- Faculty, students, and technicians who wish to enter the surgery areas and whose attire is not clean should enter through the door nearest the locker room, change into scrubs and rubber shoes before entering surgery areas.

Everyone entering the surgery suite shall wear designated scrubs in the room that are NOT worn in the clinic. Students are expected to supply their own clean scrubs and shoes. Rubber shoes are preferred, but shoe covers may be worn over CLEAN shoes (NO BOOTS). If surgery shoes become soiled or are worn into the clinic, they must be thoroughly cleaned and disinfected before returning to the surgery area. An extra pair of clean scrubs and a clean long white lab coat should always be available. Coveralls can be worn over surgery scrubs between cases to prepare the next animal for surgery.

This protocol will affect everyone involved with a case presented to surgery or when the room is being cleaned, including surgeons, technicians, anesthetists, students and housekeeping personnel.

- Scrub suits should not be used except in the surgery areas. Do not use them to palpate, do treatments, etc. No dirty scrub suits will be permitted in the surgical areas.
- Once scrub suits are soiled, they should be changed. Caps and masks will be furnished by the hospital. Scrub suits and surgery shoes must be furnished by the student.
- Surgeon and assistant(s) will scrub for at least 5 minutes in the scrub area provided in the surgery storage area. Scrub sinks are timed for a 10-minute scrub.
- A minimum number of persons should be in the surgery room during surgical procedures, e.g. surgeon, assistant surgeon, anesthetist, technician, and 1-3 student observers.
- When an item stored in the surgery area is needed in another part of the clinic, someone who is already properly attired should get the item for you, or you must dress as required for that particular area.
- All surgery areas should be cleaned and disinfected immediately after surgery. Everyone on the surgery group is expected to help.
- No clients are permitted in the surgery area.

### **PREPARATION OF ANIMAL FOR SURGERY:**

- If at all possible, depending on the type of surgery, the animal may be clipped prior to anesthesia. Check with the surgeon on the case.
- Animals should be brushed and their FEET PICKED OUT prior to entering the induction stall. This should be done in the stall or treatment area of the Large Animal Hospital.
- The horse’s mouth should be rinsed, and feet picked prior to coming to the induction box.
- Only the very least amount of prepping should be done in the surgical rooms.
- When putting a sterile surgical prep on an animal, a cap, mask, and sterile gloves are required along with a sterile prep set.
- After animals are prepped, they are taken to the induction stall for anesthetic induction, or directly to the surgery room (standing surgeries).
- Someone already in surgery room attire will then take the horse from the recovery room or through the doors to surgery.
- Recovery rooms are a part of the secondary surgical areas. Attire should be clean: cap, mask, and shoe

covers may be removed once doors to the surgical area have been closed.

- Recovery room doors leading into the surgery area should never be opened once an animal is placed in the recovery stall.
- All recovery rooms should be cleaned and disinfected immediately after the animal is removed.

## SURGERY

When an animal is admitted as a surgical patient the student should use the following guide line for surgery protocol:

- Pre-op:
  - The time of surgery, the procedure, stall number and identification number should be posted on the surgery board located in surgery hall.
  - Eight to twelve hours prior to surgery all grain and hay will be removed from the animal's stall and a muzzle applied if necessary (check with clinician). A NO FEED sign is attached to the back and front of stall door. Exceptions to this will be noted by the clinician in charge. **HORSES SHOULD HAVE WATER AT ALL TIMES AND THIS IS NOT REMOVED.**
  - After checking with the resident or clinician that surgery is to commence, the horse should be brushed and have its **feet picked out** in the stall or treatment area. The horse should then be brought to the induction stall and **the animal's mouth should be rinsed.**
  - All members of the surgical team will help with induction and positioning of the horse as directed by the resident or clinician. This includes holding the compression wall for induction, placing hobbles on the front and hind limbs after induction, moving the floor insert and surgical table, and rolling the animal on the table into the surgery suite.
  - In the surgery suite, the table should be positioned, the horse's feet should be covered, and the surgical site should be clipped and vacuumed. The table height will be adjusted by a resident or technician.
  - Students may be asked to assist with opening or retrieving surgical instruments or supplies before and/or during the operation. All students are expected to cooperate as part of the surgical team.
  - During daily surgeries, one student should ensure that any treatments or hourly walk-by of other surgical patients are performed.
- Post-Op (Student Surgeon):
  - The surgeon is responsible for all instruments used during surgery. Following the completion of the procedure, the instruments are to be cleaned and inventoried. Please inform a technician of any shortage that may occur. Then, lay each instrument on a clean towel for drying or in the cart to be sent to central sterilization.
  - Roll the surgery table out, and clean it thoroughly (Do not spray with hose!) – clean with disinfectant solution using a towel and spray bottle and store the blue pads.
  - Anesthesia equipment and fluid poles should be rolled into a bay in the surgery hall for temporary storage.
  - Lights should be wiped clean.
  - IV stands and kick buckets should be cleaned and stored.
  - The surgery floor and recovery stall should be disinfected, rinsed, and squeegeed immediately following surgery and recovery.
  - The prep area is to be cleaned thoroughly (floors, walls, etc.), and the prep cart is to be cleaned and restocked.
  - A surgery report should be typed in CPRS within 24 hours.

## SELECTED REFERENCES FOR EQUINE SURGERY, LAMENESS AND REHABILITATION

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- Ross, Mike W., and Sue J Dyson. Diagnosis and Management of Lameness in the Horse. St. Louis, Mo: Elsevier Saunders, 2011.
- Nixon, Alan J. Equine Fracture Repair (Second edition) Hoboken, NJ: Wiley-Blackwell, 2019.
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- Moyer W, Schumacher J, Schumacher J, et al. *A guide to equine joint injection and regional anesthesia*. Chadds Ford, PA: Academic Veterinary Solutions, LLC, 2011.

### **VM874 (880)**

#### **Fourth Year Equine Performance Medicine and Rehabilitation Elective**

Length of elective – 2 weeks

Minimum number of Students – 0; Maximum Number of Students – 2

Faculty – Steve Adair, Tena Ursini, Ann Oakes, Dawn Phillips, Josh Bowlin, Alexis Engelen

Grading – Honors/Satisfactory/No Credit; Students will be evaluated on the basis of their performance as well as either an online exam, case report or topic presentation. The online exam, case report or presentation will count 30% of their grade. The remainder will be performance based.

#### Description:

This elective rotation is designed to expose the student to all aspects of Equine Performance Medicine and Rehabilitation (EPR). This will be accomplished by the student's involvement in simple to advanced lameness diagnosis, advanced orthopedic surgery, podiatry and rehabilitation of the equine. This includes the utilization of advanced diagnostic equipment (Lameness Locator, Dynamic Video Endoscopy and Ultrasonography) and rehabilitation equipment (underwater treadmill, hyperbaric oxygen, cold saltwater therapy, therapeutic laser and ultrasound). Students will be involved with outpatients, inpatients, podiatry cases and occasional EPR Field Service cases. They will additionally be exposed to complimentary therapies including chiropractic and acupuncture. Students will be responsible for inpatient care under the supervision of the faculty. Weekend duties include all aspects of patient care as occurs with other large animal hospital rotations, as well as assisting on the Emergency and Critical Care Service. Students will be required to attend 6 pm week day and 8:30 am weekend stall rounds with emergency duty personnel. Clinical work will be supplemented with in-depth rounds that discuss clinical cases and the fundamentals of lameness diagnosis and equine rehabilitation.

#### Goals:

1. Understand diagnostic methods for various equine musculoskeletal injuries.
2. Monitor a case for improvement and understand when and what changes to make to a rehab protocol based on progress.
3. Formulate a rehabilitation protocol for a patient.
4. Understand what treatment modalities are best for different types of injuries.
5. Understand how to plan a re-conditioning schedule for a patient at home, once they are able to leave the rehab center.
6. Know prognosis for return to function for various injuries with various treatment protocols
7. Understand the basics of equine podiatry and principals of therapeutic trimming and shoeing

Expectations, duties and obligations:

Student will be responsible for the care of the patients in the Equine Rehabilitation and Performance Center seven days per week. This includes active participation in workup of daily cases, rehabilitation activities, and any other treatments that patients may require. Weekend duties include performing physical exams on their patients, attending 8:30 am rounds and performing any required treatments on their cases. Additionally they will enter into the Emergency and Critical Care service on Saturdays and Sundays along with the Equine Surgery Students, Equine Medicine Students and Farm Animal Medicine and Surgery Students. Involvement in managing cases that come into the podiatry center. Provide follow-up care on the farm by accompanying faculty on the EPR field service unit.

EPR Schedule:

M—TH: 8-5 Receiving

F: 9-12 Receiving

M & W: Surgery

M – F: Chiropractic – as available

M-F: Podiatry as available

M – F: 7:30 am Stall Rounds

M-F: 6 pm Emergency Rounds

Friday: 1-3 pm Sit Down Rounds

Sat & Sun: Inpatient care, 8:30 am Emergency Rounds, Emergency and Critical Care Service

**EQUINE PERFORMANCE AND REHABILITATION ELECTIVE ROTATION  
STUDY LIST**

**BEFORE THE ROTATION (From VMD 893 and VMD 844)**

Physical Exam

Conformation

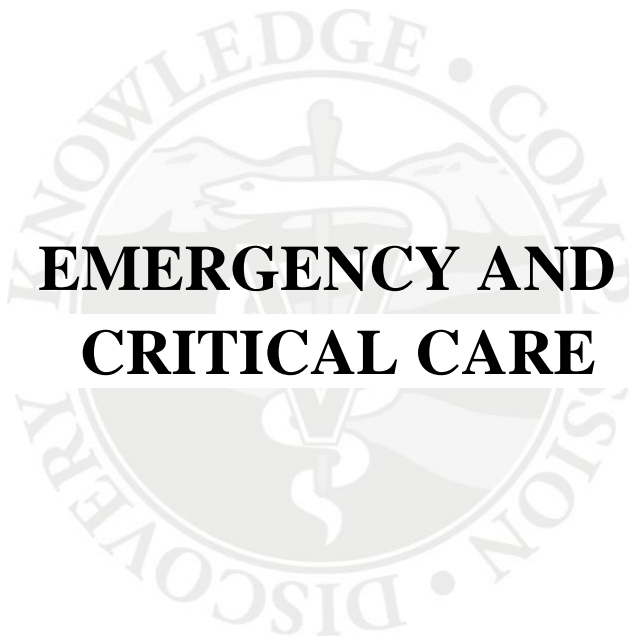
Gait

Lameness Exam

Regional Anesthesia

**DURING THE ROTATION (Presentations/Lectures to be developed by students)**

Any topic related to Equine Performance (Sports) Medicine or Rehabilitation



# **EMERGENCY AND CRITICAL CARE**

# Large Animal Emergency & Critical Care (ECC) Rotation

## COURSE DESCRIPTION

- This clinical rotation will provide senior students with experience and instruction in the areas of large animal emergency medicine and surgery and critical care
- Students will attend to patients arriving on the emergency service and provide care for animals that are hospitalized
- Instruction will be provided during the evaluation and treatment of emergency cases, during case-transfer rounds, and teaching rounds that focus upon key topics relating to large animal emergency medicine and surgery. Students will be required to review reading and computer-based course materials and complete self-study assignments
- The ECC service will attend to all in-house patients and emergencies. A student from the Field Services rotation will be assigned to Field Services emergency duty
- The ECC rotation will be coordinated and supervised by Dr. Norland and Dr. Noll
- Duties and expectations
  - Students should arrive promptly and come prepared to discuss cases and assigned reading or web-based materials
  - Students are expected to complete course materials and read about their cases at night. Sleeping and television watching will not be permitted on the ECC rotation
  - Students will be expected to work throughout the night without sleep and then rest during the day

## LEARNING OBJECTIVES

- To gain experience with admitting and caring for patients arriving as emergencies
- To become proficient at recognizing and addressing problems of hospitalized patients
- To gain knowledge in the areas of emergency medicine and surgery and critical care
- To acquire information about cases by using library and web-based resources
- To gain hands-on experience with common techniques

## GENERAL SCHEDULE

- Students will spend a total of 12 nights on the ECC rotation over a 14-day period
- There should be at least 2 students on the ECC rotation at any time
- The ECC rotation will operate from 6:00 PM until 7:30 AM the next morning on Monday through Saturday nights (shifts will last 13.5 hours). Students on the ECC rotation will be off duty on Sunday nights – shifts may be adjusted to avoid student overlap.
- Daytime duties on Saturdays, Sundays and Holidays and Sunday night duties will be covered by students on Equine Medicine, Equine Surgery, Farm Animal Medicine & Surgery and EPRC rotations
- A student from the Field Services rotation will cover Field Services Emergencies. Students on the ECC rotation are NOT permitted to accompany clinicians on Field Services calls unless permission is granted by the emergency clinician (EC)
- The ECC service will be supported by night technicians as scheduled

## NIGHTLY SCHEDULE

- Students on the ECC rotation must arrive by 6 PM to attend ward rounds (This time may be adjusted due to Covid-19, so read orientation emails carefully for times/responsibilities.)
- Ward rounds (6:00 PM) will be conducted with the EC, the house officers on primary and secondary emergency duty, and the night technician. House officers and students that are on clinics during the day

are also required to attend rounds on Monday through Friday nights

- Topic rounds and discussions or labs will be scheduled to take place between 6:30 PM and 8 PM. However, these sessions are dependent on emergencies and may vary in length according to the caseload. Rounds may be conducted via zoom or in-person. Techniques will be taught in wet labs (e.g. nasogastric intubation, suturing techniques, ultrasonography, bandage application, FA physical exam/handling)
- Techniques will be taught in wet labs (e.g. intravenous catheter placement, nasogastric intubation, suturing techniques, ultrasonography)
- All patients will be transferred to their respective service's students between 7:00 AM and 7:30 AM the next morning
- ECC Students on the ECC rotation must remain in the hospital until day shift arrives to care for patients.

## **PATIENT CARE**

### In-patients

- The ECC service will attend to all in-house patients (Equine and Farm Animal) and animals arriving on an emergency basis from 6:00 PM until 7:30 AM the next morning

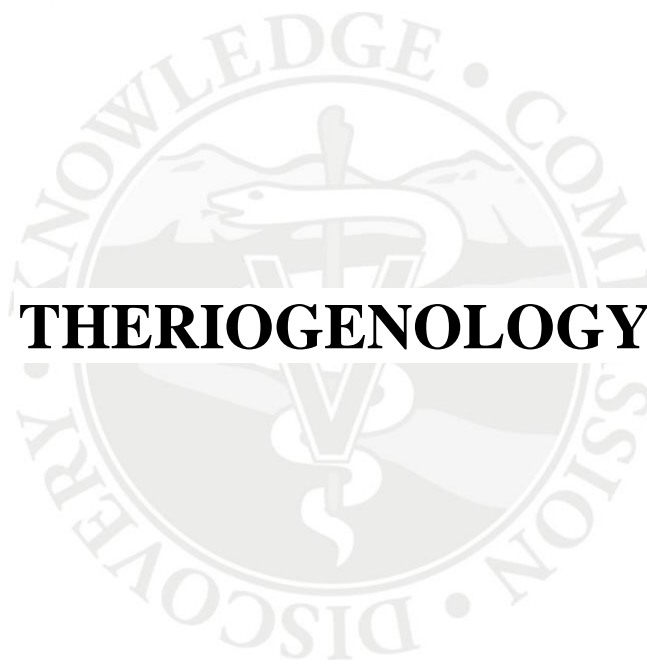
### New patients

- Students on the ECC rotation must prepare Clinicians Orders and ICU sheets for new patients before leaving at 7:30 AM the following morning. Medications should be prepared to treat the patient until 10:00 AM
- Students on the ECC rotation must also enter the first SOAP into the medical record for new patients before leaving at 7:30 AM the following morning. This first SOAP can also act as the case summary for the case
- Any 8 AM treatments and examinations for newly hospitalized cases should be completed by the ECC student prior to leaving
- Patients must be transferred by 7:30 AM. Students on the ECC rotation will not be permitted to retain their cases during the day. They must return home to sleep after cases have been transferred

## **GRADING**

- The emergency clinician will grade the students with input from house officers, technicians, and other faculty members
- The grade assigned for the ECC rotation will be based upon the student's performance (patient care, rounds participation/knowledge, teamwork) (75%) and assignments (25%)





# **THERIOGENOLOGY**

## **THERIOGENOLOGY ROTATION**

Therigenology is an elective large animal rotation. Occasionally students from the equine medicine rotation will also be allowed to participate. The amount of time spent in reproduction will depend on the reproductive case load, which is very seasonal.

1. Palpations/BSE of Mares

All findings of reproductive cases seen on an outpatient basis will be recorded on the one paged short stay form. During admissions a TPR and a thorough reproductive history needs to be taken. It should include foaling and breeding history, treatments, teasing, vaccination and deworming information. The reproductive examination will be done in the presence of a clinician and the student on the case will usually palpate the mare and take the uterine culture, cytology, and biopsy if applicable. Only in exceptional circumstances will the student be allowed to examine the uterus via transrectal ultrasonography.

2. BSE Males

These cases are admitted using the regular History/Examination Form. Special attention should be given to pertinent reproductive history (breeding history, foaling rate, quality of the mare bred, previous illnesses, vaccinations, deworming, etc.). Clinical examination should include a short evaluation of all systems including ophthalmic examination.

3. Reproductive Surgeries

Equine reproductive surgeries will be scheduled through the surgery section and may include castrations, cryptorchids, RV-lacerations, ovariectomies, penile/preputial injuries, urethral extensions, etc. Equine surgeries will be done by the equine surgery clinician or theriogenologists; Farm animal surgeries will be done by the farm animal clinician or theriogenologists.

4. Dystocia

Equine and farm animal dystocia's often need supportive treatment and therefore they should be placed in ICU where a catheter can be placed and fluids administered. After the clinician examines the animal a decision will be made as to what therapeutic approach should be used.

5. Appointment Scheduling

All reproduction appointments will be scheduled through theriogenology service. All repro cases are seen at Cherokee Farm unless there is other reason why the animal needs to come to the hospital.

# APPENDIX I

## Clinical competency assessment grading form

### Clinical Competency Assessment

The American Veterinary Medical Association Council on Education has identified 9 broad areas of competency that veterinary curricula should address. Competency is not only comprised of clinical skills and knowledge, but also communication, clinical reasoning, values and other characteristics (Epstein, Ronald and Hundert, Ed. "Defining and Assessing Professional Competence." *JAMA*. 2002;287:226-235).

To assess competency, the UT College of Veterinary Medicine faculty developed a rubric to grade clinical competency. This assessment will comprise a significant part of your grade in most rotations. Although the rubric contains 20 items, individual rotations will determine which of these items will be used in determining your grade.

Some rotations will use other forms for grading. In addition, rotations may also include clinical activities, assignments, and examinations to determine your grade. The clinician may provide additional information regarding grades to you at the start of the rotation.

Your detailed rotation grade information, once completed by the clinician, will be available to you on One45 (link located on VetNet), using your UT NetID and password.

Below is the general rubric to assess clinical competency that will be used by most rotations.

\_\_\_\_\_, Chair, UTCVM Assessment Committee

## UTCVM CLINICAL COMPETENCY ASSESSMENT GRADING FORM 2016

Assessment Category:	N/A	Unacceptable Performance	Satisfactory Performance	Good Performance	Exceptional performance
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<b>AVMA Competency 1: Comprehensive patient diagnosis</b>					
<b>1. History taking skills</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Frequently incomplete, inaccurate, or disorganized	<input type="checkbox"/> Identifies most primary information, but may lack completeness or organization	<input type="checkbox"/> Usually complete, organized & accurate with minor omissions or lapses in organization	<input type="checkbox"/> Thorough, organized & accurate
<b>2. Physical examination skills</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Examinations are typically incomplete; recordings of findings are incomplete or inaccurate	<input type="checkbox"/> Performs basic physical examination but sometimes misses abnormalities, or fails to complete thorough examination	<input type="checkbox"/> Performs complete physical examination with occasional minor omissions	<input type="checkbox"/> Performs thorough and timely physical examination and prepares detailed records
<b>3. Diagnostic planning skills</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Typically unable to identify major problems, differential diagnose, or initial diagnostic steps	<input type="checkbox"/> Creates initial problem list and plan but sometimes has difficulty identifying problems or differentials	<input type="checkbox"/> Identifies major problems, appropriate differential diagnoses and initial plans	<input type="checkbox"/> Consistently identifies all problems, most likely differential diagnoses and appropriate initial diagnostic steps
<b>4. Use of laboratory /diagnostic tests &amp; interpretation</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Has difficulty selecting appropriate diagnostic tests, or fails to provide accurate interpretation	<input type="checkbox"/> With additional preparation, provides basic interpretation of common diagnostic tests	<input type="checkbox"/> Usually identifies key diagnostic tests and provides accurate interpretation of results	<input type="checkbox"/> Consistently identifies key diagnostic tests and provides accurate interpretation of results
<b>5. Record management</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Progress notes, orders and discharge instructions are frequently incomplete, unorganized, late or missing	<input type="checkbox"/> Progress notes, orders and discharge instructions include core information but lack detail, timeliness or organization	<input type="checkbox"/> Progress notes, orders and discharge instructions are good but occasionally lack clarity, have minor omissions or are delayed in completion	<input type="checkbox"/> Progress notes, orders and discharge instructions are clear, detailed, timely & accurate

<b>AVMA Competency 2: Comprehensive treatment planning</b>					
<b>6. Treatment plans</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Has difficulty developing appropriate treatment or referral plans, responding to patient changes or determining specific orders	<input type="checkbox"/> Develops basic treatment plan for primary disease but may not address all possible problems or include clear written orders	<input type="checkbox"/> Usually develops appropriate treatment plan, with clear written orders, comprehends when to seek consultation or patient referral	<input type="checkbox"/> Consistently develops complete treatment plan for primary disease and potential complications, with clear written orders

<b>AVMA Competencies 3 and 4: Basic surgical/medical skills and case management</b>					
<b>7. Basic technical or surgical skills</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Does not demonstrate adequate knowledge of procedures or is unable to perform basic technical skills	<input type="checkbox"/> Demonstrates knowledgeable & skills required to perform basic technical skills adequately	<input type="checkbox"/> Demonstrates accurate knowledge of procedures and performs technical skills well with minor need for improvement	<input type="checkbox"/> Knowledge of procedures is complete and accurate; technical skills performed well and with attention to possible complications
<b>8. Surgical techniques</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Does not consistently use aseptic technique; instrument use is poor; suturing technique & other skills are poor.	<input type="checkbox"/> Sometimes does not use aseptic technique; sometimes has difficulty with proper instrument use; suturing technique & other skills are adequate.	<input type="checkbox"/> Typically uses aseptic technique & proper instrument use; suturing technique & other skills are good.	<input type="checkbox"/> Always uses aseptic technique & proper instrument use; suturing technique & other surgical skills are exceptional.
<b>9.. Basic medical skills</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Does not describe pathophysiologic or pharmacologic principles pertinent to case management	<input type="checkbox"/> Describes basic pathophysiology and pharmacologic information with adequate but basic level of detail	<input type="checkbox"/> Usually describes detailed pathophysiology of disease and pharmacologic basis for treatments	<input type="checkbox"/> Consistently describes detailed pathophysiology of disease process and pharmacologic rationale for treatments
<b>10. Case management and follow through</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Frequently arrives late, is disorganized, or fails to provide timely treatments or updates regarding patient status	<input type="checkbox"/> Completes daily activities and treatments; provides basic patient updates in rounds and daily client communications	<input type="checkbox"/> Organizes daily activities well, usually responds to patient changes, administers treatments as ordered and provides regular updates	<input type="checkbox"/> Consistently organizes daily activities efficiently, responds to patient changes; administers treatments and provides appropriate updates to clinicians, clients

<b>AVMA Competency 5: Basic anesthesia, pain management and welfare skills</b>					
<b>11. Basic anesthesia/sedation, pain management</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Does not demonstrate anticipation, assessment or ability to manage pain or provide basic sedation	<input type="checkbox"/> Demonstrates knowledge and adequate administration of common protocols	<input type="checkbox"/> Usually assesses and monitors pain or anticipated discomfort; knowledge and choice of protocols is accurate	<input type="checkbox"/> Accurately assesses and monitors pain or anticipated discomfort; knowledge and choice of protocols is detailed and accurate
<b>12. Animal welfare and patient care</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Unacceptable concern with patient care; fails to provide basic patient comfort or respond to patient needs	<input type="checkbox"/> Provides care for acceptable patient comfort as needed and responds to changing patient needs	<input type="checkbox"/> Conscientious level of concern with patient care; frequently interacts with patient and responds to patient needs	<input type="checkbox"/> Exceptional level of concern with patient care; provides extra attention to patient needs on an ongoing basis

**AVMA Competency 6: Basic emergency and intensive care case management skills**

<p><b>13. Emergency &amp; intensive care skills</b></p>	<p><input type="checkbox"/> Not applicable or not able to assess</p>	<p><input type="checkbox"/> Does not identify emergent patient issues, exhibits poor judgment regarding critical cases, and does not demonstrate knowledge of initial emergency care</p>	<p><input type="checkbox"/> Displays good judgment, but needs close supervision</p>	<p><input type="checkbox"/> Usually has sound judgment with emergency or intensive care cases and is able to plan supportive emergency treatments</p>	<p><input type="checkbox"/> Identifies emergent issues in admitted and critical patients and demonstrates ability to provide initial supportive emergency care</p>
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**AVMA Competency 7: Health promotion, disease prevention/biosecurity, zoonoses and food safety**

<p><b>14. Health promotion &amp; prevention skills</b></p>	<p><input type="checkbox"/> No basis to assess OR not applicable</p>	<p><input type="checkbox"/> Lacks adequate awareness and knowledge of disease prevention and control measures, including wellness programs for maintenance of individual and population health, understanding of zoonotic or biohazard threats is poor</p>	<p><input type="checkbox"/> When prompted, demonstrates acceptable knowledge of disease prevention and control measures, including adequate wellness programs for maintenance of individual and population health; understanding of zoonotic or biohazard threats is limited</p>	<p><input type="checkbox"/> Usually demonstrates accurate knowledge of disease prevention and control measures, including good quality wellness programs for maintenance of individual and population health; understanding of zoonotic or biohazard threats is good</p>	<p><input type="checkbox"/> Proactively demonstrates comprehensive and current knowledge of disease prevention and control measures, including optimal wellness programs for maintenance of individual and population health; understanding of zoonotic or biohazard threats is excellent</p>
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**AVMA Competency 8: Communication and ethical conduct skills and knowledge**

<p><b>15. Communication with clients</b></p>	<p><input type="checkbox"/> No basis to assess OR not applicable</p>	<p><input type="checkbox"/> Typically does not interact well with clients. Grievances often occur in client interactions</p>	<p><input type="checkbox"/> Sometimes has difficulty eliciting and/or giving accurate, thorough, and timely information. Needs to consider client's perspective and/or maintaining professional boundaries with clients.</p>	<p><input type="checkbox"/> Usually communicates with clients by eliciting and giving accurate, thorough, timely information, that meets the needs of both owner/ agent and animal patient.</p>	<p><input type="checkbox"/> Consistently communicates with clients by eliciting and giving accurate, thorough, timely information, that meets the needs of owner/ agent and animal patient.</p>
<p><b>16. Communication with medical personnel</b></p>	<p><input type="checkbox"/> No basis to assess OR not applicable</p>	<p><input type="checkbox"/> Typically does not interact well with other professionals. Grievances often occur in team interactions.</p>	<p><input type="checkbox"/> Sometimes has difficulty giving and eliciting accurate, thorough, timely information, that promotes effective medical care and teamwork. Needs to listen more, and consider/respect others perspectives.</p>	<p><input type="checkbox"/> Usually communicates well with other professionals, giving and eliciting accurate, thorough, timely information, that promotes effective medical care and teamwork.</p>	<p><input type="checkbox"/> Consistently communicates with other professionals-providing accurate, thorough, timely information, that promotes effective medical care and teamwork.</p>

<b>17. Rounds: includes daily rounds, grand rounds &amp; seminars</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Rarely participates; case presentations lack major components, or organization; does not respond to questions or engage in discussion	<input type="checkbox"/> Participates when addressed; Provides adequate case presentations but presentations need improvement in organization or delivery	<input type="checkbox"/> Participates regularly; respectfully engages in group discussion; provides organized, and complete case presentations with minor omissions, responds well to questions	<input type="checkbox"/> Participates regularly; respectfully engages in group discussion; provides organized, complete and concise case presentations; responds effectively to questions
<b>18. Medical ethical concerns</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Unacceptable level of ethical awareness; inability to recognize ethical issues or to demonstrate ethical decision making consistently; not diplomatic when communicating ethical dilemmas	<input type="checkbox"/> Acceptable level of ethical awareness and skills: discusses and asks questions about ethical dilemmas; at times lacks diplomacy	<input type="checkbox"/> Appropriate level of ethical awareness and skills: asks questions, discusses and uses diplomacy in implementing solutions to ethical dilemmas	<input type="checkbox"/> High level of relevant ethical awareness and skills: anticipates, asks questions, discusses, and uses diplomacy in ethical dilemmas
<b>19. Overall contribution to medical team &amp; participation</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Does not assist others on rotation or in keeping clinical areas orderly; is often late and unengaged in rotation	<input type="checkbox"/> If prompted, assists others on rotation and contributes to keeping clinical areas orderly; sometimes not on time or engaged in rotation	<input type="checkbox"/> Usually assists others on rotation; usually keeps clinical areas orderly; usually on time and engaged in rotation	<input type="checkbox"/> Always assists others on rotation; takes initiative to keep clinical areas orderly; always on time and engaged in rotation

**AVMA Competency 9: Appreciation for role of research**

<b>20. Clinical research skills</b>	<input type="checkbox"/> No basis to assess OR not applicable	<input type="checkbox"/> Does not demonstrate knowledge or acquisition of basic relevant information	<input type="checkbox"/> Identifies and presents basic relevant information from textbooks	<input type="checkbox"/> Identifies and presents relevant information from textbooks and other sources	<input type="checkbox"/> Consistently identifies, analyzes and presents relevant current literature and other sources
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**Overall Professionalism**

<b>21. Overall professionalism*</b>	<b>*Unacceptable performance in this category results in failure of the rotation</b>	<input type="checkbox"/> Does not display appropriate professionalism; is unenthusiastic about learning and participation; demonstrates gaps in professional behavior identified based on UTCVM guidelines (must comment)	<input type="checkbox"/> Demonstrates acceptable levels of maturity, preparedness and dependability; generally interacts respectfully with others or has minor areas for improvement in professional behavior (must comment)	<input type="checkbox"/> Demonstrates good level of maturity, is usually prepared & dependable, interacts respectfully with clinician, staff, classmates & clients; appears eager to learn and participate	<input type="checkbox"/> Demonstrates high level of maturity, is always prepared & dependable, interacts respectfully with clinician, staff, classmates & clients; appears eager to learn and participate
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Total checkmarks: **Not applicable or not able to assess**

Total checkmarks: **Unacceptable Performance**

Total checkmarks: **Satisfactory Performance**

Total checkmarks: **Good Performance**

Total checkmarks: **Exceptional Performance**

Comments:

Sick days taken:

Excused absence days:

Unexcused absence days:

Performance grade from clinical competency rubric:     

Grade from additional rotation assignments (if applicable):     

Final Grade:

A = 90-100%

B+ = 88-89%

B = 80-87%

C+ = 78-79%

C = 70-77%

Failure= $\leq$  70%

Final