McLennan COMMUNITY COLLEGE

WACO, TEXAS

COURSE SYLLABUS
AND
INSTRUCTOR PLAN

Anesthesia and Surgery Lecture & Lab

VTHTL 1341.76

Dennis A. Clark DVM

Anesthesia and Surgery Lecture & Lab

VTHTL 1341.75

I. COURSE DESCRIPTION

An in-depth application of surgical and anesthesia techniques including anesthesia protocols, anesthesia monitoring, anesthetic emergencies, pain management, instrument identification, use of instruments and equipment, various surgical procedures, tissue handling and suture materials as well as preparation of the patient and surgeon for surgery and postoperative recovery of the patient.

II. LEARNING OBJECTIVES

A. Familiarize the student with the various surgical procedures and instruments common to veterinary medicine
B. Familiarize the student in aseptic/sterile technique pertaining to surgery
C. Educate the student in the application of anesthesia and the use of injectable and gas anesthesia and the planes of anesthesia
D. Monitor the patient, using visual, auditory and electronic techniques
E. Recognize and manage anesthetic emergencies, use of emergency drugs and cardiopulmonary resuscitation
F. Demonstrate proper operating room etiquette
G. Understand the concept and techniques involved in pain management
H. Develop an understanding of the pre-surgical lab work involved, recognize/understand what said results mean
I. Properly maintain the patient record, surgery log, and controlled drug log pertaining to the surgical patient

III. TEXTBOOKS/SUPPLIES

A. REQUIRED TEXTS:

Veterinary Anesthesia and Analgesia, 5th Edition, by John A. Thomas and Phillip Lerche

Small Animal Surgical Nursing, 3rd Edition, by Marianne Tear

Veterinary Instruments and Equipment, A Pocket Guide, by Teresa F. Sonsthagen

Fundamentals of Pharmacology, by Janet Admundson Romich

Clinical Textbook for Veterinary Technicians, 8th Edition, by D. McCurnin and J. Bassert

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Case Studies in Veterinary Technology, by Rockett and Christensen

MCC Bookstore Website

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at http://www.mclennan.edu/campus-resource-guide/

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources, we encourage you to contact a success coach by calling (254) 299-8226. Students can visit the Completion Center Monday-Friday from 8:00 a.m.-5:00 p.m. to meet with a success coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) is open 12:00 p.m.-1:00 p.m., Monday-Friday, without an appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be contacted/notified through your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

* **Click Here for the Minimum System Requirements to Utilize MCC's D2L|Brightspace** (**www.mclennan.edu/center-for-teaching-and-learning/teaching-commons/requirements**)
Click on the link above for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

B. REQUIRED SUPPLIES
   1. Instrument pack-available to purchase through vet tech department
   2. Stethoscope
   3. Watch with a second hand
   4. Thermometer
   5. Scrub set/scrub top with jeans-no shorts, closed toed shoes (clean)

IV. LABORATORY PROCEDURES

A. During this lab class you will put to use many of the skills and techniques you have acquired in previous courses while combining these with new skills you will be exposed to while in the anesthesia and surgery lab.

B. Students will be divided into groups of three to four students. **EACH GROUP WILL BE RESPONSIBLE FOR DOING A DAILY PHYSICAL/TPR ON THEIR ASSIGNED PATIENTS. EACH GROUP WILL SOAP THEIR PATIENTS DAILY.** During each surgical procedure, each student will have a different role: anesthetist, surgical assistant, and circulating assistant. These duties will rotate with each surgery. Surgery groups/partners may also be rotated during the course of the semester at the discretion of the instructor. **All members of the student group will perform the physical exam on the patient prior to the day of surgery and will perform the necessary laboratory blood work: fecal, urinalysis, CBC, and preanesthetic panel.**

THIS IS TO BE PREFORMED BEFORE THE START OF LAB!!!

C. Functions of the student anesthetist include, but are not limited to:

- Review medical record of the patient, and make sure consent forms are properly filled out and signed for stated procedure (shelter and non-shelter animals)
- Communicate to kennel workers proper fasting instructions for the patient the day prior to surgery
- Participate with your partner(s) in the pre-surgical evaluation
- Properly perform maintenance check on anesthetic machine prior to use in surgery, as well as readying any other monitoring equipment for patient the day of surgery-ie: pulse oximeter, ECG machine, etc.
- Place IV catheter in patient/remove when indicated after surgery
- Calculate and administer medications/anesthetics, etc. as ordered by veterinarian for patient
- Induce general anesthesia, intubate patient, and maintain proper level of general anesthesia
- Maintain the sterile field/asepsis
- Log ALL controlled substances used for patient
- Keep written anesthesia monitoring record on patient during the anesthetic period-this means you MUST have a watch with a second hand, thermometer, and a stethoscope

- Properly connect patient to surgical monitoring equipment and have a working knowledge of normal parameters of such for species undergoing surgical procedure
- Monitor patient during pre-anesthesia, induction, general anesthesia, and recovery from anesthesia
- Evaluate, with your partner(s), the patient the day after surgery, including TPR, incision check, providing kennel assistants with proper care instructions-such as feeding/watering, and assessing patient's demeanor or attitude. The information is to be recorded in the patient's medical record (see IV B)

D. Functions of the surgical assistant include, but are not limited to:

- Review medical record of the patient, and make sure consent forms are properly filled out and signed for stated procedure (shelter and non-shelter animals)
- Participate with your partner(s) in the pre-surgical evaluation
- Make sure all surgical materials are prepared
- Ready the surgery suite for procedure-(getting out supplies needed)
- Set out caps, masks, gloves for surgeon and his/her self (Dr. Clark wears a size 8 & ½ glove)
- Prepare yourself, as the surgical assistant in an aseptic manner in masking, cap, gown and gloving
- Know the name and proper use for ALL surgical instruments to be used for procedure that is scheduled
- Maintain strict aseptic technique
- Close surgical incision
- Clean surgical instruments and equipment and ready for re-sterilization
- Remove sutures in 10-14 days post op, or as directed by surgeon
- Log surgical procedure in surgery log
- Prepare patient surgery report, consent forms (if indicated), daily patient examination, etc. to turn in to surgeon for signage/review
- Evaluate, with your partner(s), the patient the day after surgery, including TPR, incision check, providing kennel assistants with proper care instructions-such as feeding/watering, and assessing patient's demeanor or attitude. The information is to be recorded in the patient's medical record (see IV B)

E. Functions of the circulating assistant:

- Properly restrain patient for pre-anesthetic evaluation/anesthetic induction/surgical prep
- Ready surgery scrub solutions, replenish as needed
- Prepare recovery cage for patient/clean as needed

- Shave and aseptically scrub/prepare patient for surgical procedure
- Handling/transport patient correctly; both to and from surgery
- Open packs/supplies for surgeon/assistant
- Maintain sterile field
- Clean surgery suite at end of procedure in preparation for next patient
- Make sure all instruments and gowns are autoclaved by the day following surgery
- Be ready to assist all members of the team at any time with tasks (ie. tying surgical assistants gown, help with anesthetic monitoring, getting supplies during surgery, etc.)
- Evaluate, with your partner(s), the patient the day after surgery, including TPR, incision check, providing kennel assistants with proper care instructions-such as feeding/watering, and assessing patient's demeanor or attitude. The information is to be recorded in the patient's medical record (see IV B)

NOTE: No one in lab will be allowed to leave until everything is picked up, put up, cleaned up, supplies restocked, surgical materials are readied as needed for sterilization, laundry is washed and dried, and all trash is taken out to dumpster (this is NOT the custodian's duty).

V. DRESS

You will be expected to be dressed appropriately for lab class. This means wearing a scrub set. No open toes shoes are allowed, and those that you wear, must be clean and free of debris and organic matter. If you have long hair, it must be worn up-ponytail, bun, etc.

Please note that the surgical assistant is required to remove all rings, bracelets and watches during assisting. These items are your responsibility to keep up with and place in a secure location.

You must wear closed-toe non-slip shoes at all times for lab. Students may wear the following to class:

Scrub pants (must be worn in all labs) **Scrub top (must be worn in all labs)**

The following is **prohibited** and will result in being dismissed from class for the day, being marked as absence, and a grade of 0 (F) for the day:

Open toed shoes Shorts Capri Pants Short skirt or kilt T- Shirt Sleeveless shirt Facial Piercings (one 1 earring allow in each ear) Any distractive/suggestive clothing, piercing, or body art.

Visible tattoos and body jewelry (other than earrings confined to the lobes – 1 per ear) are required to be covered up or removed, respectively, when in lecture or laboratory sessions at the Veterinary Technology facility, field trips, class trips to shelters or veterinary facilities, and at all times during your practicum. Disruptive hair styles are discouraged. Acceptable hair colors fall under the normal range of natural color.

VI. HEALTH AND SAFETY

A. There are inherent risks with inhalation and some injectable medications (tranquilizers/sedatives). It is not required, but strongly advised that if a student has concerns about a possible pregnancy, or knows she is, she notifies either Dr. Clark or Sue Allen (instructors) prior to exposure of any of these products-especially inhalation anesthetics. If any student has any contact with injectable medication occurs, whether superficial or injected accidentally, you the student are to notify an instructor immediately so appropriate action may be taken

B. In addition to the safety of the students, the safety of our animal patients must also be considered. If an instructor feels that a situation involving an animal needs to be resolved as quickly as possible, the animal's health and well-being will be considered paramount. Although this lab is to teach the student techniques for inducing, maintaining, and the recovery of animals under anesthesia, the health and well-being of that patient come before student instruction.

   Students can and will be removed from lab if animal welfare is considered to be in jeopardy by any of the course instructors for the following reasons.

   1. Physical or mental impairment by any substances (legal or illegal)
   2. Lack of concern for patient well being
   3. Outburst of temper, anger, or other disruptive behaviors
   4. Any attempt to intentional harm a patient or another person

   This will be considered grounds for immediate dismissal from this class, VTHT 1341, with a failing grade

VII. CELL PHONE POLICY

Cell phones and their use during lab will be **PROHIBITED** and all phones will be placed in a secure, collective location until lab is over. Your responsibility during this class is to your patient, team, and surgeon. Unless an emergency need arises, there will be **NO exceptions**. Cell phones and their use in ANY manner-including text messaging, will not be tolerated in the classroom. If extenuating circumstances state you must be available, such as a sick child/family member, you will need to notify your instructor prior to the start of that class day. If you are found using your cell phone, you will be asked to leave the class, marked as absent for that class period, and, if testing, will be given a "0" for that test.

VIII. LABORATORY OUTLINE

The initial labs will be approximately as follows:

DATE	**CLASS**
Week 1	OR conduct, Aseptic technique, Pack prep, Instrument use/ID, etc.
Week 2	Anesthetic machine-use/care of, Levels of anesthesia, Intubation, IV catheter placement
Week 3	CPCR, Emergency drugs and ACLS
Week 4	Fluid therapy & Pharmacology, Sutures-material/patterns/ties, Surgical Assistance
Week 5	Surgery lab - Simulations
Week 6	Surgery lab – Simulations, Review Procedures and Policies, Mid-Term Practical Exam
Week 7	Start clinical surgeries

IX. LABORATORY GRADING

There will be two (2) lab practicum's during this semester, at approximately mid-term and a final at the end of the semester. These will be over the material we have covered to that point in class. The final lab exam will be comprehensive. It may include verbal (oral) answers, written,

drug calculations, and hands on demonstrations of the various subjects you have learned. **These exams will NOT be allowed to be made up.** Also taken into consideration is your performance, your participation, your ability to work cooperatively with other members of the team, and your knowledge during the course of the entire semester.

You will also be graded on your participation in Lab, your patient SOAP's, and your surgical/anesthetic documentation.

X. GRADE DETERMINATION

A. Exams-approximately 6 exams will be given in lecture during this course. They will be worth a minimum of 100 points each.

B. Make-up tests may be allowed at the decision of the instructor, and will be done in a timely manner. They may be in a different format that the original exam.

C. Final exam-the final lecture exam will be comprehensive over the material covered in the course of the semester. The final exam will be worth 200 points

D. Two lab practicum's will be given during the course of the semester. The final lab exam will be comprehensive over the material covered throughout the semester. These practicums will be worth approximately 100 points each. Lab tests WILL NOT be allowed to be made up.

The instructor may use pop-quizzes at any time as a way to measure learning and to take attendance. All pop-quizzes will be worth 10 points.

"This is for illustration purposes in calculating your grade in this course. The point value of exams and/or quizzes may change depending on the information covered."

A. 6 lecture exams at 100pts. each= 600 points
B. Lab practicum exams at 100 points each= 200 points
C. Final exam-(lecture) at 200 points= 200 points
D. Soaps=300 points
E. Lab participation=600 points
F. Kennel Duty=200 points

Total possible points-2100 points
A=2100-1932
B=1931.99-1785
C=1784.99-1575
D=1574.99-1470
F= 1469.99 and below

You must pass both the lab final exam and lecture final exam with a 75% (75 points and 150 points respectively) to pass this course.

XI. CHEATING

Cheating or dishonesty in relation to this class will NOT be tolerated. This includes copying answers from another student, copying anything from a source without citing proper sources, author, etc. Suspected cheating will result in a "0" given for that exam and/or assignment, or you may be assigned an "F" for the course. You are responsible for your own work.

Click Here for the MCC Academic Integrity Statement
(**www.mclennan.edu/academic-integrity**)
The link above will provide you with information about academic integrity, dishonesty, and cheating.

XII. FINAL GRADE DETERMINATION

See the lecture syllabus for explanation of grade determination. You MUST pass this course with a "C" or better. Failure to pass this class will result in your dismissal for the program.

XIII. COMMENT

This class, like many situations in veterinary practice, require you to function, think and work both independently and cooperatively with your teammates. Any student who is not performing in this capacity may be asked to leave class for that period by the instructor.

If any student has a conflict with another student, you will schedule an appointment with me to meet and discuss your issues outside of class. I will NOT let it interfere with the class and the well-being of our patients.

XIV. ATTENDANCE

A. This is an actively participatory course. Absence for any reason is greatly discouraged. Being late more than 5 minutes but less than 10 minutes will be considered to be tardy. Being tardy 2 times will count as 1 complete absence. Being late more than 10 minutes will be considered an absence.
B. According or MCLENNAN COMMUNITY COLLEGE ATTENDANCE POLICY: Absence from 25% of scheduled lecture and or lab meetings will be taken as evidence that a student does not intend to complete the course and the student MUST withdraw from the course in order to receive a grade of "W".
C. * **Click Here for the MCC Academic Integrity Statement**

(**www.mclennan.edu/academic-integrity**)
The link above will provide you with information about academic integrity, dishonesty, and cheating.

* **Click Here for the MCC Attendance/Absences Policy**
(www.mclennan.edu/highlander-guide/policies)
Click on the link above for the college policies on attendance and absences. Your instructor may have guidelines specific to this course.

XV. PHOTOGRAPH & SOCIAL MEDIA POLICY

No pictures maybe taken during this class of other people including instructors and students, patients, exams, tests, homework, or instructional models without the express written consent of the instructor(s) of this class. **Any sharing of photographs of this class on ANY social media sites is strictly forbidden.** No statements that would be considered inflammatory or derogatory towards another student, instructor, or client will not be allowed on social media**. VIOLATION OF THIS POLICY WILL RESULT IN AUTOMATIC FAILURE OF THIS CLASS**.

XVI. OFFICE HOURS

A. **Instructor:** Dennis A. Clark DVM
B. **Office**: Veterinary Technology, Room 125
Hours: Monday 1200hrs to 1600hrs; Tuesday 1130hrs to 1250hrs; by appointment on Fridays
Lecture- Mondays 0900-0950hrs and Tuesdays 1030-1120hrs
Lab- Wednesday 0800-1650hrs
C. Instructor Contacts:
e-mail – **dclark@mclennan.edu**
Office – (254) 299-8771
Cell phone/text – (254) 715-3258

Email is the best way to contact me. It is essential that you have a fully functioning email account and that you check it often. This is the primary way that I communicate. You need to use your student email address as this is where emails will be sent via Brightspace and Webadvisor.

MCC Official E-mail Policy

This policy applies to all students enrolled at McLennan Community College (MCC) and to all MCC employees. All students, staff, and faculty will use their official college e-mail addresses when conducting college business.
It is MCC's policy to assign all students, upon registration, an official e-mail address, which may remain in effect up to twelve months after students are no longer enrolled at MCC. MCC student e-mail addresses will be the only e-mail authorized to communicate official college information or business. Students are expected to read and, if needed, respond in a timely manner to college e-mails. It is suggested that students check college e-mail daily to avoid missing time-sensitive or important college messages. Students may forward college e-mails to alternate e-mail addresses; however, MCC will not be held responsible for e-mails forwarded to alternate addresses. A student's failure to receive or read official communications sent to the student's assigned e-mail address in a timely manner does not absolve the student from knowing and complying with the content of the official communication.

Privacy and Confidentiality
Official college communications sent by e-mail are subject to public information, privacy, and records-retention requirements and to other policies and procedures.

Instructional Uses of E-mail
Faculty members will determine classroom use of e-mail or electronic communications. Faculty will expect students to check college e-mail on a regular basis unless another communication method is indicated in the course syllabus. Faculty should inform students in the course syllabus of any special or unusual expectations for electronic communications. If a faculty member prefers not to communicate by e-mail with her/his students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Appropriate Use of Electronic Communication
The official college e-mail address assigned to students can be revoked if it is determined the student is utilizing it inappropriately. College e-mail must not be used to send offensive or disruptive messages nor to display messages that violate state or federal law.
Use of College e-mail must comply with the following policies:

(a) "Responsible Use of College Computing Resources" (E-XXXI); and

(b) "General Conduct Policy" (E-VIII).

Professional Expectations

1. All students will dress per Veterinary Technology Professional Dress Code. This is in both the Veterinary Technology Handbook and your syllabus.
2. There will be no profane or vulgar language used at MCC Veterinary Technology. This includes outside of the classroom, during kennel duty, or on field trips.

3. Students will be on time. Tardiness is unacceptable. This includes class, field trips, and kennel duty.
4. Students will be polite and courteous to the public, other students, MCC staff, and MCC faculty.
5. The social media policy for MCC Veterinary Technology will be **strictly** adhered to by all students.
6. There will be no abusive behavior (physical or verbal) towards people, animals, cadavers, supplies, or equipment.
7. All veterinarians will be addressed as Doctor with their last name used:

   Example – I am Dr. Clark

   All technicians will be addressed as Mr., Ms., or Mrs.

   Example – Mrs. Allen
8. Students will clean all laboratory areas at the end of class and will not leave until all lab space, surfaces, equipment, and supplies are properly cleaned, disposed of, or put back in proper working order.
9. Any cheating, stealing, or dishonesty can and will result in dismissal from the program.
10. Students will have all kennel duties, assignments, and other assigned tasks completed on time.

The Veterinary Technician's Oath

"I solemnly dedicate myself to aiding animals and society by providing excellent care and services for animals, by alleviating animal suffering, and promoting public health.
I accept my obligations to practice my profession conscientiously and with sensitivity, adhering to the profession's Code of Ethics, and furthering my knowledge and competence through a commitment to lifelong learning."

Accommodations/ADA Statement

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. Instructors should not provide accommodations unless approved

by the Accommodations Coordinator. For additional information, please visit mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu
254-299-8122
Room 319, Student Services Center

TITLE IX

* **Click Here for more information about Title IX**

(**www.mclennan.edu/titleix**)

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling Dr. Drew Canham (Vice President for Student Success) at 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC by calling 299-8210. The MCC Student Counseling Center is a confidential resource for students.

McLennan's Title IX webpage (http://www.mclennan.edu/titleix/) contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence or domestic violence.

* *You will need to access each link separately through your Web browser (for example: Internet Explorer, Mozilla, Chrome, or Safari) to print each link's information.*