



WACO, TEXAS

**COURSE SYLLABUS
AND
INSTRUCTOR PLAN**

**VETERINARY ANATOMY AND PHYSIOLOGY
VTHT 1413.075**

LAUREL SHRAWDER, LVT

NOTE: This is a 16-week course.

VETERINARY ANATOMY AND PHYSIOLOGY

VTHT 1413.075

Course Description:

Gross anatomy of domestic animals including physiological explanations of how each organ system functions. Semester Hours: 4 (3 lec/4 lab)

Prerequisites and/or Corequisites:

Admission into the Veterinary Technology Program

Course Notes and Instructor Recommendations:

Anatomy and Physiology can only be learned through repetition. To fully understand and remember the material it is important for you to read the chapters before class and then to spend a certain amount of time reviewing the information each day. The more you review something the easier it is to learn and remember. You should plan on spending at the **minimum**, 2 hours of study for every hour of class/lab. **Do not wait until the day before the exam to try to learn everything.**

****All notices and information related to this course will be posted on Brightspace and/or your MCC student email. Please check them regularly.**

Instructor Information:

Instructor Name: Laurel Shrawder, LVT

MCC E-mail: lshrawder@mclennan.edu

Office Phone Number: 254-299-8735

Cell Phone Number: 512-461-2600

Office Location: 126 Veterinary Technology Building

Office/Teacher Conference Hours: By Appointment; Friday 8:00 to 5:00PM by appointment

Other Instruction Information: Email is the best way to contact me. It is essential that you have a fully functioning MCC 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. My cell phone number is provided and should only be used in important or emergent matters.

*****INSTRUCTOR NOTE:*****

I read my e-mail at least twice a day during the week; however, if you send me an e-mail at 11 PM with a question you need answered before the class tomorrow, I likely will not read it before class. I do not always read e-mails on the weekends. Do not expect instantaneous responses

from me via e-mail. Instructors are not 24/7 call centers. Please plan ahead. Remember, poor planning on your part does not constitute an emergency for anyone else.

DO NOT email, text, or leave class to contact another instructor. Any issues should be managed before or after scheduled class times.

When you send an e-mail, ALWAYS begin the subject line with VTHT and your course number. If you respond to my e-mail, hit reply, and make sure VTHT (1234.56) is present in the subject line. **Please use complete text in your emails. I do not want to see: u, ur, b4 etc.** Be professional in your communications to your instructors.

Required Text & Materials:

Title: Clinical Anatomy & Physiology for Veterinary Technicians

Author: Thomas Colville and Joanna M. Bassert

Edition: 4th

Publisher: Elsevier

ISBN: 9780323793414

ISBN E-Book: 9780323826310

Copyright: 2024

Title: Clinical Anatomy & Physiology Laboratory Manual for Veterinary Technicians

Author: Thomas Colville and Joanna M. Bassert

Edition: 4th

Publisher: Elsevier

ISBN: 9780323793421

ISBN E-Book: 9780323826341

Copyright: 2024

Title: Case Studies in Veterinary Technology.

Author: Jody Rockett and Chani Christensen

Edition: 1st

Publisher: Rockett House

ISBN: 9780615435053

MCC Bookstore Website: <http://www.mclennan.edu/bookstore/>

Methods of Teaching and Learning:

1. Lectures and class discussion on material.
2. Lecture exams are objective in format, and may include multiple choice, true/false, matching, fill in the blank, labeling, or short answer. Please know that I normally review each exam after the test, as Brightspace does not always identify correct “fill-in-the-blank” answers.
3. Final exam is worth 200 points and is comprehensive over the entire semester. The final exam will be in similar format as the lecture exams.
4. Assignments and exams will be through Brightspace for this course.
5. Some labs could be help on campus in the Simulation Lab.

Course Objectives and/or Competencies:

Upon successful completion of this course the student will be able to:

1. Describe the physical and chemical factors that are responsible for the origin, development, and progression of life.
2. Detail the anatomy and physiology of the cells, tissues, organs, and systems
3. Explain the interrelationships of body organs and systems
4. Compare the anatomy and physiology in our domestic animals
5. Compare the physiology and various pathophysiologic conditions of animals and relate this to similar conditions in humans
6. Identify various muscles, organs and structures within the body using anatomical models and specimens.
7. Recognize muscles, arteries, veins using a preserved specimen and comparing this in the live animal.

The study of Anatomy and Physiology is the foundation for the recognition of normal and abnormal clinical conditions of animals.

VETERINARY ANATOMY AND PHYSIOLOGY

VTHT 1413.075

Course Outline or Schedule:

Week	Reading Assignments	Course Outline
1	Pg. 1 - 46	Chap 1: Intro to Anatomy and Physiology Chap 2: Chemical Basis of Life
2	Pg. 47 - 73	Chap 3: Anatomy of the Cell
3	Pg. 74 - 104	Chap 4: Cell Physiology
		Exam 1: Chap 1 - 4
4	Pg. 105 - 149	Chap 5: Tissues: Living Communities
5	Pg. 150 - 173	Chap 6: The Integument and Related Structures
6	Pg. 174 - 214	Chap 7: Skeletal System
7	Pg. 215 - 231	Chap 8: Muscular System
		Exam 2: Chap 5 - 8
8	Pg. 232 - 283	Chap 9: Nervous System Chap 10: Sense Organs
9	Pg. 284 - 303 & Pg. 477 496	Chap 11: Endocrine System Chap 18: Urinary System
		Exam 3: Chap 9 - 10 & 18
10	Pg. 304 - 358	Chap 12: Blood, Lymph and Lymph Nodes Chap 13: Immunity and Defense
11	Pg. 359 - 382	Chap 14: The Cardiovascular System
12	Pg. 383 - 400	Chap 15: Respiratory System
		Exam 4: 12 - 15
13	Pg. 401 - 476	Chap 16: Digestive System Chap 17: Nutrients and Metabolism
14	Pg. 497 - 535	Chap 19: Reproductive System Chap 20: Pregnancy, Development, and Lactation
		Exam 5: 16, 17, 19 and 20
15	Review	Review
16		Comprehensive Final

VETERINARY ANATOMY AND PHYSIOLOGY

VTHT 1413.075

Course Grading Information:

Grading	
Item	Points
5 Lecture Exams (100 points each)	500
1 Comprehensive Final	200
Comprehensive Lab Final	200
10 Worksheets (20 points each)	200
Total Possible Points	1100
Grade Breakdown	
1100 - 990	A
989 - 880	B
C= 879-770 (MUST make a 70% or higher), so 8251 points is a "C"	C
769 - 660	D
659 or Below	F

The point system is only for illustration purposes in calculating your grade in this course.

***You must pass this course with a minimum of a "C" (70%) or better. Failure to achieve a minimum of a "C" average in this course will result in you being dropped from the Veterinary Technology or Veterinary Assistant program at the end of the Fall 2023 Semester. This will prohibit you from advancing to the Spring 2024 semester. ***

Late Work, Attendance, and Make Up Work Policies:

If a student is not in attendance in accordance with the policies/guidelines of the class as outlined in the course syllabus as of the course census date, faculty are required to drop students from their class roster prior to certifying the respective class roster. A student's financial aid will be re-evaluated accordingly and the student will only receive funding for those courses attended as of the course census date.

McLennan Community College Veterinary Technology and Assistant Attendance Policy

Regular and punctual attendance is expected of all students, and each professor should maintain a complete record of attendance for the entire length of each course. Students will be counted absent from class meetings missed, beginning with the first official day of classes. Students, whether present or absent, are responsible for all material presented or assigned for a course and will be held accountable for such materials in the determination of course grades. In the case of online and hybrid courses, attendance will be determined in terms of participation, as described in the course syllabus. Absence from a maximum of **15 percent (15%)** of scheduled lecture and/or laboratory meetings during any semester, will be taken as evidence that a student does not intend to complete the course.

Unless a professor has reason to believe the student will complete the course, the student will be withdrawn from the course with a grade of W. The professor may reinstate the student if satisfied that the student will resume regular attendance and will complete the course.

If the student's 15 percent absences are reached in any semester, the professor may assign a W if the student is passing and requests to be withdrawn. However, if a student who is not passing reaches the 15 percent point, the student will receive an F. In extenuating circumstances, the professor may assign a W to a student who is not passing.

Each absence will count toward attendance requirements in each course.

Students will be permitted to make up class work and assignments missed as outlined in the course syllabus due to absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, (4) Pregnant or Parenting Protections under Title IX and/or Texas State Education Code Chapter 51, Subchapter Z, Section 51.982 or (5) any excused absences as outlined in Section III of this policy. In all other cases, the instructor has the prerogative of determining whether a student may make up work missed.

The student is expressly responsible for any work missed regardless of the cause of the absence. The student must discuss such work with the instructor and should do so in a timely fashion. Communication between the student and instructor is important, and it is the student's responsibility to initiate such communication.

Students, whether present or absent, are responsible for all material presented or assigned for a course and will be held accountable for such materials in the determination of course grades.

NOTE: Labs involving live animals will NOT be allowed to be made up. Other labs and any makeup work allowed is at the discretion of the course instructor.

You can understand the importance of being present. We understand, at times you may have legitimate reasons for being absent. You are on your honor to limit your absenteeism from class. If we suspect that an individual is abusing the system, and is absent more than a few times, at the discretion of the instructor, points can be deducted from your grade. Each instructor will have their own policy concerning class attendance. See the course syllabus for each class for specific policies. **Absences from kennel duty are normally not excused. You will need to review the policy with your instructors regarding this.**

Individual departments and programs may also have specific attendance requirements. (See appropriate departmental policies and/or refer to the course syllabi for details.)

McLennan Community College Attendance Policy

<https://www.mclennan.edu/employees/policy-manual/docs/B-II.pdf>

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

As stated in the Student attendance policy: Students will be permitted to make up class work and assignments missed due to absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, (4) the observance of a religious holy day, or (5) active duty in the National Guard or Reserves. Also, the instructor has the prerogative of determining whether a student may make up work missed due to absences for other reasons. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion. If the student misses an exam he/she will be allowed to make up the missed exam ONLY IF the absence is caused by one of the 4 causes listed above. Personal illnesses will require a doctor's note before you can make up any missed exams or work. **Missed labs will be made up by scheduling time outside of class with the instructors. LABORATORY EXAMS CANNOT BE MADE UP UNDER ANY CIRCUMSTANCES.**

Late Assignments: will have a (5) point deduction taken per late assignment, unless it is for one of the permitted absences noted above.

There will be NO retakes for failed exams.

Pay attention to important dates on Brightspace! Example: Circled is the Due date for a Quiz. You can also see when the Quiz starts/becomes available and Ends/closes in Brightspace.



*****INSTRUCTOR NOTE:*****

Do not submit *.pages, *.numbers, or *.key files. These are Apple iWorks files and cannot be opened. If you submit Apple iWorks files and your work cannot be opened by the instructor, you will receive a zero for the assignment.

Do not submit *.odp, *.odt, or *.ods files. These are OpenOffice files and, when opened in Microsoft Office, will lose formatting and document properties. If you submit OpenOffice files and your document loses formatting when opened, you will lose any points associated with the formatting of the document for the assignment.

If you submit *.pdf files, your professor will be limited to how they can markup the document or assist with modifications to the document. PDF files are an acceptable submission format, but may limit the assistance that you can receive if corrections or revisions must be made.

Do not submit assignments in Google Docs, your instructors can always open these submissions and will cause a delay in grading. You will be asked to resubmit the assignment as a Word document.

Technology in the Classroom:

Students can utilize laptops in class if they are used for the class the student is attending. Please do not work on other classes or anything that may distract you from valuable information.

Cellphones in the Classroom:

Students will not be on their phone during class time hours. If you need to have your phone out, please discuss this with your instructor prior to class. Students will be asked in class to put their phone away.

NEW TARDY POLICY EFFECTIVE SP 2020

To ensure students, arrive on time for class, please note that effective Spring 2020, the classroom instructor will be locking the classroom door 10 minutes after class begins. If a student arrives late and the door is locked, please know that the student will NOT be allowed in the classroom and will be counted absent for that class period. If a student leaves the classroom during the class (for anything other than an emergency)-such as becoming ill, or specific phone calls-for example a sick child, doctor's office, etc.-they will NOT be allowed to return to the classroom. Personal needs need to be taken care of between classes.

For classes (either lecture or labs), that last more than the approximate 50-minute period, a tardy student may be allowed into that class when the class takes a scheduled break or at the instructor's discretion if scheduled breaks are not practical. This policy is to help diminish disruption of the class, and to help ensure student safety while in the classroom.

Student Behavioral Expectations or Conduct Policy:

STUDENT UNIFORMS/DRESS CODE:

The type of scrubs and lab coats worn by veterinary technicians in veterinary clinics is required in laboratory classes starting with the first semester in the first year of training. Student's dress and appearance always will be expected to reflect the dress worn when the student becomes employed as a veterinary technician. Scrub tops and jeans are acceptable in some courses. If jeans are worn, they must NOT have any holes/tears/rips in them, and be clean. You are required to have at least one set of MCC Veterinary Technology scrubs to wear as directed by your instructors for labs, field trips and special occasions. These are available at the MCC Bookstore. Otherwise, scrubs of various prints and colors may be worn to lecture and laboratory sessions as long as the scrubs are in good condition, fit well, and are clean not wrinkled, and in good taste. Full scrubs, close toed shoes, and full surgical attire must be worn during all surgery laboratories. Coveralls may be worn when working around large animals or appropriate clothing as determined by instructor's class syllabi. Lab coats are required in labs that involved handling blood, fecal material, or urine. Lab coats that have the MCC Vet Tech logo are available in the MCC Bookstore. Coveralls are available at most retail clothing stores and are similar to the Dickies brand coveralls. Closed-toe, non-slip shoes, such as boots or tennis shoes, must be worn at all times during all labs and field trips. It is strongly advisable to wear boots when handling large animals to minimize foot injuries.

VETERINARY ANATOMY AND PHYSIOLOGY

VTHT 1413.075

1. Visible tattoos and body jewelry (other than earrings confined to the ear lobes-1 per year) may be required to be covered up or removed, respectively, when in lecture or laboratory sessions while at the veterinary technology facility, and AT ALL TIMES during your practicum. Gauged ears require a plug in each while in any/all program classes, field trips or public events.
2. No loose jewelry or loose-fitting clothing (such as bracelets, scarves) are typically allowed in any lab due to safety concerns.
3. Disruptive hair styles are discouraged. Acceptable hair colors fall under the normal range of natural color.

Personal Grooming Guidelines:

1. Professional appearance when in clinical settings.
2. Good personal hygiene is required.
3. All clothing should be clean and free from wrinkles, stains, ragged hems. Hems and pants should be at least ½” from the floor.
4. Hair should be well groomed and pulled out of face and off shoulders in the laboratory courses.
5. Male students should be freshly shaven or have well-groomed beards, mustaches, and sideburns.
6. Fingernails are to be kept at a length and shape consistent with patient and personal safety. NO artificial nails are allowed.
7. The use of safety goggles or other eye protection may be required in the laboratory classes, and the wearing of exam gloves when handling laboratory specimens, including anatomical specimens, blood, urine, and feces, is required.

You must always wear closed-toe non-slip shoes for lecture and lab. No sandals, flip-flops, Crocs, etc.

Students may wear the following to class: Jeans (clean with no holes, no rips, and no tears), Scrub pants, Dress slacks, Scrub top, MCC Vet Tech Polo shirt or polo shirt, or other shirts deemed appropriate.

Preferred dress for all vet tech classes: Scrub top, Scrub pants or jeans

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, Leggings, Short skirt or kilt, T- Shirt (MCC shirts may be considered), Spaghetti strap/Cami-style/Tank tops (Allowed under Scrub top), Sleeveless shirt (such as shirt/t-shirt with the arms cut off), Facial Piercings (one 1 earring allowed in each ear-no lip/nose/tongue or other piercings with jewelry), and Any distractive/suggestive clothing, piercing, or body art.

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.**

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."

* **[Click Here for the MCC Academic Integrity Statement](http://www.mclennan.edu/academic-integrity)**
(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](https://www.mclennan.edu/highlander-guide/policies.html)**
(<https://www.mclennan.edu/highlander-guide/policies.html>)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

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

Updated 07/18/2023



ACADEMIC RESOURCES/POLICIES

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. For additional information, please visit www.mclennan.edu/disability.

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

disabilities@mclennan.edu 2542998122 Room
319, Student Services Center

Title IX:

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 acting Title IX Coordinator at titleix@mclennan.edu or by calling, Dr. Claudette Jackson, (Accommodations/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center at (254) 299-8210. The MCC Student Counseling Center is a

confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>. Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It 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.

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/>

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom. You can contact the Academic Support and Tutoring team via Zoom or email (ast@mclennan.edu) by going to our website (<https://www.mclennan.edu/academic-support-and-tutoring/>).

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing crew@mclennan.edu or a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to https://mclennan.co1.qualtrics.com/jfe/form/SV_07byXd7eB8iTqJg. Both the Completion Center and Paulanne's Pantry are located on the second floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to

<https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html>

to find out more about the emergency grant. The application can be found at

https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf.

MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating. The unauthorized use of artificial intelligence (AI) for classwork can be a violation of the College's General Conduct Policy. Whether AI is authorized in a course and the parameters in which AI can be used in a course will be outlined by each instructor.

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to <https://www.mclennan.edu/center-for-teachingandlearning/FacultyandStaffCommons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

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 notified via 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.

Email Policy:

McLennan Community College would like to remind you of the policy (<http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are

expected to read and, if needed, respond in a timely manner to college emails. For more information about your student email account, go to www.mclennan.edu/studentemail.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- [Email Setup for iPhones and iPads](#)
- [Email Setup for Androids](#)

Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

For more helpful information about technology at MCC, go to [MCC's Tech Support Cheat Sheet](#) or email helpdesk@mclennan.edu.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.