VS 333 Domestic Animal Anatomy Syllabus

Instructor Information

Instructor: Dr. Shari Lanning

Office phone: 970-297-3740

Cell phone: 970-692-7105

Email: Shari.Lanning@colostate.edu (Responses to email will be provided within 24 hours

during weekdays.)

Getting Started

To Get Started with the Course

- 1. Watch and read important information related to the course by clicking on the links below.
- 2. Set your Canvas Notification Preferences read how at How do I set my Notification Preferences? If you don't set Notification Preferences, you may miss email or other important messages from your instructor or others in your courses. Alternately, you might receive a lot of notices that you don't want to see.
- 3. Explore the course layout by clicking on items on the Left Navigation Menu.
- 4. Begin your coursework by clicking on "Home" and selecting the "Module 1" icon under "Unit One."

Email

- To send email to your instructor or to class members:
 - o Select "Inbox" from the top of the course window.
 - o Select the "Compose a new message" icon
 - Select course participant(s) for addressing email.
 - o You are also welcome to email me directly: Shari.Lanning@colostate.edu

Technical Support

This course requires the following downloads (also link to "Media Recommendations"): (Links to an external site.)Links to an external site.

- 1. **Flash**: https://helpx.adobe.com/flash-player.html (Links to an external site.)Links to an external site.(Chrome is phasing out Flash, so try a different browser if you like to use Chrome.)
- 2. **Java**: https://www.java.com/en/download/win10.jsp (Links to an external site.)Links to an external site.

- 3. **Adobe Reader**: https://get.adobe.com/reader/ (Links to an external site.)Links to an external site.
- 4. **Microsoft Silverlight**: http://www.microsoft.com/silverlight/ (Links to an external site.)Links to an external site.
- 5. If you plan to access the course off campus, which is likely, you will also need to establish a VPN connection (Pulse) with CSU. Here's the address: (Links to an external site.)Links to an external site.http://www.acns.colostate.edu/Connect (Links to an external site.)Links to an external site. (follow instructions for "Off-Campus Network Access"). Both Android and iOS (iPad, iPhone) devices do have the ability, along with computers, to use VPN.

NOTE: Chrome is the Canvas standard browser, but I have also had success with Safari, Opera and Firefox. If something doesn't work, try a different browser.

NOTE ABOUT USE OF MOBILE DEVICES: Try downloading the mobile Canvas application.

Need technical assistance with your Canvas course? Try the following:

- Click on the "Need help with Canvas?" link on the Homepage.
- Canvas Student Resources: http://info.canvas.colostate.edu/student-resources.aspx (Links to an external site.)Links to an external site.
- Morgan Library Help Desk Support: http://lib.colostate.edu/services/computers/technical-support-helpdesk (Links to an external site.)Links to an external site.

Course Overview, Goals and Objectives

The primary goal of this course is to present the comparative anatomy of the dog, cat, horse and cow using clinical examples to enhance the students' ability to describe how form (anatomy) dictates function (body movement and response to environment).

This is a full domestic animal anatomy course. However, because of obvious online constraints, the course is NOT going to offer you an opportunity to develop the hands-on skills of manipulating dissection instruments on a cadaver. Minus physically cutting and touching tissues, however, the online laboratories (via Dr. Ray Whalen's phenomenal 3-D programs!) provide you with the ability to see various dissected structures -VERY similar to a real lab experience.

General Course Objectives

The general goals of the course are to help you learn anatomical terminology, recognize anatomical structures and to understand functional anatomy, NOT to make you a professional anatomist! I will expect you to be able to describe and identify the anatomical structures of the body as well as describe how they work together for various functions. Similarly, I do not expect you to be a veterinarian, however, I will discuss the clinical significance of many anatomical

structures -these are simply to help you apply your growing anatomical knowledge and relate "form to function."

The lecture and laboratory are intimately correlated and inseparable. Exams will integrate material from both the lecture and laboratory modules and objectives.

The course has been designed for students in veterinary science, animal science, equine science and general biology, and for those preparing for careers in other animal careers such as preveterinary medicine and those interested in physical therapy of animals.

Course Prerequisites

Students must have taken at least one college--level course in general biology or zoology.

Textbook & Required Materials

A course requirement is the Virtual Canine Anatomy, Virtual Feline Anatomy, Virtual Bovine Anatomy, and Virtual Equine Anatomy (VCA, VFA, VBA, and VEA) programs by Dr. Ray Whalen. Most of the laboratory assignments will be delivered via these two programs (except comparative anatomy of the cow and the horse after Unit One - these are embedded in the course). Dr. Whalen has graciously provided the programs for FREE to students in this class. You will have access to the CVA/VFA/VBA/VEA programs as you are registered for this course. If you would like to purchase a Flash Drive of Canine Virtual Anatomy to download the program onto your computer for quicker and more consistent access, please contact Dr. Whalen at Lawrence.whalen@colostate.edu. If you utilize the programs for free and feel inclined to donate some amount for the use of these phenomenal programs (not required but deeply appreciated), Dr. Whalen uses all donations to develop other species programs and to keep current programs updated -and to continue to offer the programs for free to undergraduate and veterinary students around the world.

The textbook IS NOT REQUIRED. Since I do not take any test questions from any textbooks, you can use any good anatomy textbook or legitimate online resources to supplement information. Feel free to contact me for recommendations.

Some good websites:

- University of Minnesota (http://vanat.cvm.umn.edu/ (Links to an external site.)Links to an external site.)
- Cornell University (http://www.vet.cornell.edu/oed/horsedissection/ (Links to an external site.)Links to an external site.)
- http://www.images4u.com (Links to an external site.)Links to an external site. (interactive program)
- I want to stress that I test from my lectures and the list of lab objectives, not a reference text.

Modules and Laboratories

In the modules, the normal anatomy is described. Also, the comparative characteristics of these structures are considered, and the relationships of structure and function are emphasized.

The laboratory exercises are an important aspect of this course. Students should be able to identify anatomical parts in the dog, cat, cow and horse and provide functional correlates.

Proctor Information

All exams in this course must be taken under the supervision of an approved proctor.

Check the course and my emails to make sure you know the time the exam closes. It is usually 8 PM Colorado time. If you need the full 2 hours allotted for the exam (most students take less than one hour), that means you need to schedule the exam earlier than 5:30 PM (to account for computer issues, getting logged in and dealing with any issues that come up with security and sign in, etc.). Exceptions will not be granted. If you take the exam in the CSU Testing Center, they close at 5 PM, so you need to arrange a starting time prior to 3 PM.

If taking the exams with ProctorU, it is also YOUR responsibility to pre-check computer requirements and, in advance of each exam, make sure everything is working smoothly (computer, connection, Internet, etc.). Ability to connect with the Internet on the day of the exam is REQUIRED, as is preparing your computer as per the information at the technical link on the Homepage. Delay past exam closing time due to technical issues is not an excuse for requesting delaying an exam – although perhaps it's a good reason to schedule earlier in the day just in case.

You have three options for exam proctoring:

1. The CSU Testing Center on campus in Fort Collins provides on-site proctoring on-campus in Fort Collins, CO. Schedule a proctoring appointment in advance by going to https://tilt.colostate.edu/testingCenter/csuOnline/ (Links to an external site.)Links to an external site. There is no charge for students enrolled in Sec 801 (CSU Online), there is a charge of \$5/half-hour for students in Sec 401 (regular CSU students). Please note that the testing center's last appointment is at 3 p.m. A policy for this class is that on-campus proctor arrangements must be made a minimum of 4 working days PRIOR to the exam dates. If a student has difficulty with his/her proctor situation in the CSU Testing Center on the day of an exam, and it is the result of not following this policy, e.g. the testing facility is full or you've arrived too late, the exam will not be moved to a different date, and the student will receive a zero grade for that exam.

Follow the instructions at this site: University Testing Center-https://tilt.colostate.edu/testingCenter/csuOnline/ (Links to an external site.)Links to an external site. . Below is a summary.

- Under "To Take an Exam at the University Testing Center" Select "Submit a Proctor Identification Form"
- 1. Fill out your information in the provided boxes

- Note that your CSU ID is required
- Your email should be your official CSU email.

2. Enter your course information

- Course number should look like ACT 100
- Select the current term.
- 3. Select your Proctor type form the drop down box.
 - o University Testing Center
- Select "Schedule a Proctored Exam"
- 1. Choose a group Select "Proctored Exam"
- 2. **Choose a group** "Proctored Exams-Computer"
- 3. **Select a time** (how long you think you'll need)-I give you 2 hours for each exam to provide extra time for students with approval to have double time, but also so all students have some extra time if they want it, but truly, most students submit the exams in about 45-50 minutes. The vast majority of students will only need to **sign up for one hour.** You might want to choose extra time for the first exam and see what works for you. Remember, Sec 801 (distance) students pay for this service as part of their registration fees. Sec 401 (regularly enrolled on-campus CSU students must pay for the service -- sorry, not my decision).
- 4. Choose a date (see schedule link on Homepage). You must take the exam on the scheduled date.
- 5. Choose a (start) time See note above, and remember the testing center closes at 5 PM.
- 6. Who is taking this exam? Fill out as appropriate.
- 7. **Exam guideline acknowledgement -** Read and check "I agree." I have asked that each student be permitted on empty sheet of paper to take notes about questions they want to look up or ask me about.
- 8. **Needed Information** Fill out
- Be sure to use CSU ID number, not your social security number
- Course name: Domestic Animal Anatomy
- Instructor Name: Shari Lanning
- Instructor email: Shari.Lanning@colostate.edu
- Instructor institution: Colorado State University
- Add to Cart
- Payment is not required online, if there is a fee for your exam, the Testing Center will let you know when you arrive.
- If you have completed all necessary registrations, click Complete Registration.
- Once you have clicked **Complete Registration**, your confirmation email will appear on the screen, you may print a copy for your records.
- Upon a successful transaction you will receive an immediate **email confirmation receipt**.
- 2. **ProctorU** is an online proctoring service that allows you to take your exam from the comfort of your home. ProctorU is linked to Canvas, so there is no need to schedule for the exam ahead of time. Please contact ProctorU for updated fees. See the document below to review exam-taking via ProctorU:

2.

Even though the ProctorU service is available 24/7, you must take the exam in the time frame I require, e.g. 8 AM -8 PM Colorado time.

https://chrome.google.com/webstore/detail/proctoru/goobgennebinldhonaajgafidboenlkl (Links to an external site.)Links to an external site.

Please make sure you are testing alone in a quiet, well-lit area. You can find ProctorU's exam readiness guide at the following link:

www.proctoru.com/exam-readiness-guide (Links to an external site.)Links to an external site.

In order to use ProctorU, you will need to have a broadband internet connection, a webcam (internal or external), a Windows or Mac Operating System, and a government-issued photo ID. You can find ProctorU's tech requirements by visiting the following link:

https://www.proctoru.com/tech.php (Links to an external site.)Links to an external site.

If you would like to test your system before your test you can do so at the following link.

https://test-it-out.proctoru.com/ (Links to an external site.)Links to an external site.

Similar to on campus proctoring, there is a charge only if you are in Section 401. I have had great experiences with (and great confidence in) this service (you can take exams alone in almost any location).

3. Rarely, I will approve <u>local-to-your-area approved proctors</u>. If either of the above proctoring arrangements don't work for you, please let me know why and send me the name of your proposed proctor, location, relationship to student, and contact information (do not register through CSU for this, just contact me), and I'll contact him/her with instructions and the password. You may use local testing centers, libraries, community colleges, office locations (professional sites), but not private residences, coffee shops, etc. You may use professional testing folks, teachers, professors, supervisors, etc., but not relatives, friends, roommates, etc. I need MUCH advanced notice for these types of arrangements, but a MINIMUM of 2 weeks prior to the first exam (or each exam if different site/proctor) is required.

Please let me know if you have any questions!

Course Content

1. Units and Modules

There are **4 units in the course, each with a comprehensive exam**. Each unit is divided into modules. Each module contains information presented as an interactive page with images and course content. The first part of each module consists of a list of objectives and a lecture outline. All of the information you need to know for exams is contained within the body of the online

modules and labs. There are several "See it in the lab!" buttons you will see in lectures. These are just shortcuts and you are still responsible for other materials in the lab. Each module is associated with a "Bonehead Quiz". **These quizzes are worth 5- 10 points each and will count towards your grade**. See the schedule to know when each of these quizzes are due. No makeups will be allowed.

2. Laboratories

The labs will primarily be delivered via VCA, VFA, VBA, and VEA programs as described above. There are also flash laboratories embedded in the course, which you will also be responsible for reviewing.

There is a list of objectives for each module to guide you on the terminology you need to know, e.g. you do not need to know all of the terminology presented in VCA/ VFA/ VBA/ VEA, only those listed on my weekly list of lab objectives.

3. Video/Audio Captures of Modules

The above-described lectures and labs are the primary way in which important material will be delivered in this course, and will be the "bottom line" of information you need to know for the exams. However, in order to **supplement and clarify** the information contained in the lectures, I have recorded videos of each lecture to provide a guide for the material. **It must be emphasized that the guides are not meant to be a replacement for the written narrative lectures.** Plus, I can make quick edits to the written lectures, but it takes a while to re-record that same video lecture, so the content of the written lecture and video capture might be very slightly different. The video-tape links are available at the top of the page of each lecture.

4. Other Review Materials

A link to Quizlet questions is associated with each module. The TAs have developed and continued to update these questions. I do not write these questions. The Bonehead Quizzes are written by me, and therefor represent a more accurate example of question style and content you will need to know for the course.

5. Optional Case Studies

Following the modules of each week of each unit will be Clinical Case Studies. These are real veterinary cases and are strictly supplemental. They are intended to be fun, and most students really enjoy them. They help students put together what they've learned in the previous lectures. **You will not be tested on these cases.**

Examination, Assignments and Grading

A total of 350 points come from the 4 exams (200 points), and 30 Bonehead Quizzes (150 points). Optional extra credit in the form of a 2-phased assignment (20 possible points) is available.

1. EXAMS--200 points

Exam Information

There will be **4 online examinations** in this class. Each exam consists of multiple-choice lecture and lab questions (images) and one bonus question. You access course exams via the "Quizzes" icon on the left of the homepage (more later). Dates for exams can be found under the "Course Schedule" icon on the homepage. The following exam information is very important. **Please read this thoroughly!**

Exams must be taken between 8 AM and 8 PM Colorado time. The exam automatically closes at 8 PM Colorado time, so make sure you start the exam early enough to give yourself time to complete it.

Exams are closed book, closed note (closed access to any version of course content) examinations. The last question of each exam is an Honor Pledge asserting that you have not received or given any unauthorized assistance in this exam. By submitting the exam after reading the pledge, you have pledged that you did not give or receive any assistance during the exam (all exams are closed course, closed books, closed notes, closed electronics of any kind other than your login to the exam itself). I do allow students to have a single sheet of blank paper available during the exam for notes.

Under NO circumstances, should you print an exam. Printing examinations at any time during the entire course will result in an F grade for the course. I am able to track printing to individual students as well as specific computers, so please do not print exams (you may, however, print lectures and labs if desired). If you are or become aware of past exams that are available to students (from before I had this tracking mechanism), please report this to me immediately, as it would give an unfair advantage to a few students in the class.

All exams must be taken and submitted online. Each examination will be comprehensive, including the final examination (as outlined below).

Any student who does not take the Final Exam (Exam 4) will automatically be given an F as a final grade in the course.

The laboratory questions present a fixed image with a question (images will be taken from the course or labs). The lab questions are also multiple choice. **After you "submit" your exam, you will immediately receive your score and a one-time opportunity to view your exam.**

The exams typically are composed as described below. However, for each exam you will receive updated information via email in the days beforehand.

Unit 1	Modules 1-9	50 pts.	50 multiple-choice questions (with images)
Unit 2	Modules 1-22	50 pts.	50 multiple-choice questions (with images); includes approximately 5 review questions.
Unit 3	Modules 1-127	50 pts.	50 multiple-choice questions (with images); includes approximately 8 review questions.
Unit 4	Modules 1-31	50 pts.	Final Examination 50 multiple-choice questions (with images); includes approximately 10 review questions
Quizzes	3 total (5 points each)	150 pts.	See schedule for various due dates. Quizzes will be multiple choice or fill in the blank and will only include material from that lecture. They do not include lab material. These quizzes are also closed book/ note.
	Total Points Possible from Exams and Quizzes	350 pts	There are an additional 20 extra credit points available from the Phase 1 and 2 Assignments.

Make Up Policy

Exams are scheduled on specific dates listed in the Course Schedule (see link on the homepage). You MUST take the exam on these dates. Proctoring must be arranged by you in advance as per the information on the Proctor link on the Homepage. It is YOUR responsibility to take the exam on the designated date! If you fail to take an exam on the specified date, you will receive zero points for that exam.

The only reason I will excuse a student from taking an exam on a designated date is a doctor's document stating that the student was medically incapable of taking the exam OR if there was an error in opening the exam on our end. A student CANNOT decide what is a "good" or "bad" reason for not taking an exam and then simply inform the instructor of that decision.

Exam Notifications

It is the students' responsibility to check their course email daily. Important information about an exam and the course in general will be communicated via email. Failure to check email on a regular basis cannot be used as an excuse for "not knowing what's going on." While I make every effort to be available on exam dates, rarely I have to assign a teaching assistant as the primary contact (for instance, if I am traveling on business). Make sure you and your proctor know the person to contact in an emergency (problem with the exam). This information will be relayed by email prior to, or on the morning of, the exam date.

Students with Special Needs

If you have a documented disability and utilize the office of Resources for Disabled Students, please contact me.

2. QUIZZES- 150 points

There will be **30 online quizzes** in this class, each worth 5 points. Each quiz will be a combination of multiple choice, fill in the blank, and true/false type questions. Images from that lecture may be used in the quiz.

You access course quizzes via the "Quizzes" icon on the left of the homepage (same for exams). Dates for quizzes can be found under the "Course Schedule" icon on the homepage (more later). Quizzes are available from the first day of the course at 6am. The quizzes close at 10pm MST the week listed in the syllabus. You will be given 20 minutes to take the quiz.

Quizzes are closed book, closed note (closed access to any version of course content), closed electronics of any kind other than your login to the quiz itself.

Each quiz will only cover the content covered in its associated lecture and are intended to test your knowledge of the lecture so you can determine if further review of the material is needed prior to the exams. There will be no cumulative material represented in the quizzes.

Under NO circumstances should you print or copy a quiz. Printing quizzes at any time during the entire course will result in an F grade for the course. I am able to track printing to individual students as well as specific computers, so please do not print quizzes. If you are or become aware of past quizzes that are available to students (from before I had this tracking mechanism), please report this to me immediately, as it would give an unfair advantage to a few students in the class.

After you "submit" your quiz, you will immediately receive your score and a one-time opportunity to view your quiz.

3. OPTIONAL Extra Credit Assignments--Pathology Project-- 20 points

Access and submit assignments via the "Assignment" link on the Homepage.

Purpose:

Many diseases and trauma/injury create pathology that affects the musculoskeletal system, which subsequently affects normal function and/or movement (REQUIRED). Select any pathology or injury (dog, horse or cow) that somehow involves abnormal musculoskeletal or organ function as part of the problem. Do not use any of the clinical case scenarios covered in the course.

There's nothing that can help you appreciate the form and function of anatomy like seeing how far things can go awry if the normal anatomy and function is disrupted by disease or injury!

Directions (Two phases):

PHASE 1 (5 points) – See schedule for due dates/ times

- 1. Select an interesting disease/trauma/injury that affects dogs, horses or cows. It might be a condition you have encountered in a farm/ranch animal or a personal pet. It might be something you've just been curious about. The key is that is **must be manifested as something that affects normal anatomy**.
- 2. PHASE I Assignment:
 - 1. **One paragraph,** single-spaced description about why you selected this condition and how the pathology affects the musculoskeletal system. How does this pathology change the form and/or function of involved cells/tissues/organs? I call this the "pathophysiology" of a disease/trauma/injury. It's what a veterinarian would have to know about condition, not what a client or even a technician would need to know. Relate form and function.
 - 2. **One scientific reference**. It can be Internet, Journal article, or any legitimate medical/scientific resource, but it cannot be a "layman's" reference with watered down terminology, e.g. it must reflect the science and pathology of the condition in a detailed scientific manner.
 - 3. DO NOT EXCEED ONE PAGE. All assignments must be submitted online via the instruction on the "Assignments" link on the left side of the Homepage.

PHASE 2 (15 points)-- See schedule for due dates/ times

Expand your project. Include details about what is currently known about the disease (don't use dated references!). Explain the life cycle of the disease: how it starts (if known), predispositions (age, genetic, breed, etc.), course of disease, clinical signs, diagnosis (include anatomical and/or histopathological images or findings), patho-physiology, prognosis, and treatment (just limited details on treatment). Maximum of 3 single-spaced pages plus images/photos you may want to include (do not include images in page count). Include a minimum of three professional references. Professional references are those from legitimate professional medical websites and/or journals, e.g. NOT lay person references such as breeder/pet sites/journals, popular human health magazines/websites, self-help sites, etc. Points may be deducted for spelling/ editing errors.

Grading Criteria, Phase 2

Points Added

- 1. Cause/Start of disease, including predisposition(s):: up to 2 pts
- 2. Clinical signs: up to 2 pts
- 3. Diagnosis: up to 2 pts
- 4. Ability to relate pathological changes in normal anatomy to the manifestations of the disease/trauma + images: up to 5 pts
- 5. Progression and Prognosis: up to 2 pts
- 6. Treatment: up to 2 points

Points Deducted:

- 1. Exceeds minimum 3 pages: 1 pt deducted for each narrative page (non-image) over 3 pages
- 2. Less than 3 professional references: 1 point deducted for each less than 3 and/or for inadequate type of reference
- 3. Gross misspellings or editing mistakes.

3. GRADES Total points 350

Your final grade will be generated from scores on the 4 examinations (200 pts), plus your Bonehead Quiz grades (150 pts). There is also an additional 20 total points extra credit that can be earned by successfully completing the Disease Project Phase 1 and 2 Assignments.

Grade Distribution:

315-350 pts. = A

280-314 pts. = B

245-279 pts. = C

210--244 pts. = D

less than 210 = F

With special permission from the instructor, and under certain circumstances beyond the student's control, if the student is unable to complete the course in the designated time period, a grade of "Incomplete" may be assigned. At Colorado State University, an incomplete grade converts automatically to an F on the transcript if the course is not satisfactorily completed within a year of the time the incomplete is awarded. It is against CSU policy to give a grade of "I" (Incomplete) to a student who has a grade of D or F at the time of the request.

E-mail

It is very important that you check email and announcements every day for important information. Any changes in the scheduling of course exams or other important information will be sent via email and announcement.

Office Hours

The TAs and I do not have set office hours. If you would like to schedule a personal conference with me or one of the teaching assistants, email us and we can meet in person (if local) or set up a phone, Skype or other form of personal meeting. We all like to interact with students in the class, so please don't hesitate to contact us.

Study Tips

On the course home page there is a link called "Study Tips." The tips are mostly provided by students who previously took the course. I suggest you read through this page early. It provides some guidance about structuring your time to ensure your success in this class.

The "Biggies" for this course are:

- 1. **Do not get behind -- pace yourself.** This is a 4 credit upper division science course. You will need to spend a minimum of 6 hours a week "attending class" and at least another 6 hours a week studying (more if you take the condensed summer session) = **plan for at least 12 hours per week for this course!**
- 2. **Take notes as you go through the lectures**, the same as you would during an in-class lecture. Students have found this more helpful than printing lectures and highlighting text (and it saves trees).
- 3. Be sure to **read course email and announcements** for critical updates about exams and other important information.

Academic Integrity Policy

Under NO circumstances, should you print an exam, either during the exam or afterwards when I open it for your review. Printing examinations at any time during the entire course will result in an F grade for the course. This course will adhere to the CSU Academic Integrity Policies and Guiding Principles (Links to an external site.)Links to an external site. as found in the General Catalog and the (Links to an external site.)Links to an external site. Student Conduct Code (Links to an external site.)Links to an external site. You should not communicate with other students in the class the day of the exam -- after you have taken the exam.

CSU Honor Pledge

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you affirm the CSU Honor Pledge as part of completing your work in this course. While you will not be required to affirm the honor pledge, you will be asked to affirm the following statement at the start of your exams:

"I have not given, received, or used any unauthorized assistance."

Further information about Academic Integrity is available at CSU's **Practicing Academic Integrity** (Links to an external site.)Links to an external site.