BIOMED 4510/V\_M\_S 7510

**Elements of Equine Clinical Anatomy: Forelimbs**

**COURSE PROFILE**

**Course description**

This course provides a basic foundation in selected aspects equine clinical anatomy for veterinary technicians, pre-veterinary students and other students wishing to enhance their understanding of equine science and veterinary medicine. This course covers the anatomy of the forelimb.

**Instructors**

Joanne Kramer, DVM, ACVS

A355 Clydesdale Hall

College of Veterinary Medicine

University of Missouri

Columbia, MO 65211

573-882-3513

[kramerjo@missouri.edu](mailto:kramerjo@missouri.edu)

David T. Cross, PhD DVM

W112 Veterinary Medicine Building

College of Veterinary Medicine

University of Missouri

Columbia, MO 65211

573-882-3074

[crossdt@missouri.edu](mailto:crossdt@missouri.edu)

**Major objectives**

After completion of the course, a student will:

1. Be able to identify components of equine anatomy on anatomical specimens, images of clinical cases, their own horses, and selected diagnostic imaging (eg radiographic images)

2. Recognize anatomy involved in selected clinical syndromes

3. Demonstrate an understanding of the function of selected anatomy

**Prerequisites**

5 hours of biologic science or zoology, or equivalent, or instructor’s consent or an AAS or equivalent degree in veterinary technology from an American Veterinary Medical Association-accredited program.

**Delivery**

This course is delivered completely online. Students are not required to attend class at specific times; however, it is important that they follow the attendance/participation guidelines and meet due dates and deadlines for readings, assignments, discussions, quizzes, and exams. Communications will be through the discussion board, announcements, and e-mails. Course delivery strategies may include: required readings and study material, resources linked to the internet, brief audio or audio/video lectures, assigned projects, use of the discussion board, use of the internet, and e-mails.

**Organization**

Course materials are located under the left-hand tab in the course Blackboard site under “Units”. “Sessions” are found under “Units”. There are 8 Units in this course. Further directions are provided in Blackboard.

**Required Materials** A textbook is not required for this course. Required instructional material will be posted on Blackboard.

**EVALUATION OF STUDENT PERFORMANCE**

**Modes of Evaluation**

Course participation-10%

Weekly Quizzes-10%

Examinations-60%

Exam 1

Exam 2

Exam 3

Final Exam (Comprehensive)

Clinical Project-20%

**Satisfactory Performance**

There will be 1000 possible points. A portion of the possible points will be achieved each week. More than 600 points are required for a passing grade. Students with less than 61% at mid-term will receive a warning. Grades will be available in Blackboard. To insure confidentiality, they will not be sent by e-mail.

Undergraduate performance:

Points will be earned via weekly quizzes, assignments, proctored exams and a clinical project.

Graduate performance:

In addition to the above requirements, graduates students will be expected to provide more in depth analysis during assignments. They will also produce a clinical project with a greater degree of knowledge and detail than the undergraduate students. Exam and quiz questions will be different than the undergraduate class and will reflect this higher performance standard.

**Exams and Quizzes**

The final exam is available only under the supervision of a proctor. Contact Mizzou Online to locate a local proctor for your exams. Two minutes per question will be allowed for unit exams and quizzes. Seventy minutes will be allowed for the final exam.

Quizzes and Unit Exams are not proctored, but you are expected to complete the quizzes and unit exams by yourself. Each quiz or exam is timed so that you will not have time to rely on reference materials, i.e. they are not open-book quizzes and exams. If you take more time than the quiz or exam allows, your score will be deducted the points of one question for each minute in overtime.

You may take a quiz or exam only once. You must complete the exam or quiz once you start it. You may NOT come back to the quiz later. If you are disconnected during an exam, contact the instructor immediately and then send an e-mail to blackboard@missouri.edu with your name, username, course name, title of the quiz or exam, and a description of the problem. To insure your answers are logged, click “Save”at the bottom of the page every 2 to 3 questions. Click“Submit” after you have reviewed your answers to have the quiz or exam graded.

**Clinical Projects**

One clinical project will be assigned during this course. The project be will a power point, wiki or video based demonstration or presentation of a clinical skill or concept. Clinical projects will be scored using the grading rubrics supplied on Blackboard.

**Grading**

The grading scale will be A to F, including some pluses and minuses but no A+, C+, C-, D+, or D-.

Grades will be based on the following scale:

96-100% = A

91-95% = A-

88-90% = B+

84-87% = B

81-83% = B-

71-80% = C

61-70% = D

60% or less = F

Graduate grading will not include +/-

90-100% = A

80 – 89% = B

70-79% = C

65-69% = D

64% or less = F

Note: A Certificate in Biomedical Technology requires at least a “C” grade in this course, plus a total of 15 credit hour BIOMED courses with an average GPA in all BIOMED courses of 3.0.

**TENTATIVE COURSE SCHEDULE**

**Unit 1: Introduction**

Session 1: Basic Applied Anatomy-Introductory

Session 2: Clinical Correlation- How the limb works

**Unit 2: Shoulder/Withers**

Session 3: Basic Applied Anatomy-Shoulder/Withers

Session 4: Clinical Correlation-Limb Protraction and Retraction/Sweeney

**EXAM #1**

**Unit 3: Elbow/Radius**

Session 5: Basic Applied Anatomy-Elbow/Radius

Session 6: Clinical Correlation-Limb Protraction and Retraction/Elbow Extension

**Unit 4: Carpus/Metacarpus**

Session 7: Basic Applied Anatomy-Carpus/Metacarpus

Session 8: Clinical Correlation-Carpal and Metacarpal Disorders

**EXAM #2**

**Unit 5: Fetlock/Pastern**

Session 9: Basic Applied Anatomy-Fetlock/Pastern

Session 10: Clinical Correlation-Fetlock Extension

**Unit 6: Foot and Stay Apparatus**

Session 11: Basic Applied Anatomy-Foot

Session 12: Basic Applied Anatomy-Foot and Stay Apparatus

**EXAM #3**

**Unit 7: Clinical Correlation Laminitis**

Session 13-14: Clinical Correlation –Laminitis

**Clinical Project**

**Unit 8: Course Review/Final**

Session 15: Course Review

Session 16: Final Exam

**FINAL EXAM**