Equine Physical Rehabilitation Certificate Program

WHY OUR PROGRAM?

Equine rehabilitation focuses on restoring or improving the health of horses, whether they are athletes, farm workers, or pets. At the Equine Hospital at the University of Tennessee Veterinary Medical Center, board-certified veterinary surgeons utilize various modalities including hyperbaric oxygen therapy, underwater treadmill, therapeutic ultrasound, neuromuscular electrical stimulation, shockwave therapy, chiropractic, acupuncture and therapeutic exercise in rehabilitating and conditioning horses. The UT College of Veterinary Medicine offers the only university-based Equine Rehabilitation Certification Program. Four of the program instructors are charter Diplomates of the newly recognized American College of Veterinary Sports Medicine and Rehabilitation (ACVSMR). The specialty organization meets the unique needs of athletic and working animals to optimize performance, treat injury and disease, and provide rehabilitation after injury. Participants are instructed on rehabilitation therapies that have a specific scientific basis in either humans or animals. Visit equinerehab.utk.edu for more information regarding the UTVMC’s equine rehabilitation.

The certificate program in equine rehabilitation is a sequence of postgraduate courses for qualified individuals which includes case studies and a cumulative examination. The courses are designed to guide the practitioner from the theoretical foundations to the clinical applications of equine rehabilitation. The Certificate Program in Equine Rehabilitation meets the needs of the veterinarian, veterinary technician, physical therapist and physical therapy assistant. The University of Tennessee, College of Veterinary Medicine oversees the curriculum, which meets the university’s high standards.

Our Mission

To promote the art and science of equine rehabilitation, this will be achieved by:

- Educating professionals in the principles and practical application of equine rehabilitation
- Promoting and supporting research that will advance the knowledge, skill and treatment of equine rehabilitation
- Making the benefits of equine rehabilitation known to the veterinary, physical therapy and related professions

Pre-requisites

- Veterinarian - Proof of degree(s) and/or license(s) must be provided.
- Physical Therapy - Proof of degree(s) and/or license(s) must be provided.
- Physical Therapy Assistant - Proof of degree(s) and/or license(s) must be provided.
- Veterinary Technician* - Proof of degree(s) and/or license(s) must be provided.
- If your state does not require a degree to be a veterinary technician, a letter from your employer, who must be a D.V.M. or V.M.D., is required. This letter must include:
  - A statement that reflects that you work in the capacity of a veterinary technician
  - A list of your duties as a veterinary technician
- Student in one of the above professions
  - You must have completed at least one year of your program before taking your first course
  - Successful completion of your degree is required prior to taking the certificate exam
  - Proof of enrollment must be made available.

Individuals must have demonstrated equine handling abilities and are required to sign a statement to that effect.

1-865-974-5703 or visit us at equinerehab.utk.edu
**Course Description**

**Equine - Part I:**
Introduction to Equine Rehabilitation and Therapeutic Modalities
*(Required for all participants)*

Equine I reviews the regulatory issues involved in this field of practice from the perspective of physical therapists and veterinarians. Basic equine anatomy, gait analysis, conformation, lameness evaluation and neurologic examination will review collaboration between the veterinary and physical therapy professions will be emphasized to enhance the learning experience.

During this the participant will be trained in the use of selected physical agent modalities used in equine physical rehabilitation. The following physical agents will be covered: superficial heating and cooling agents, manual therapies, electrical therapies (for example: electrical stimulation), mechanical therapies (for example: therapeutic ultrasound, shock wave therapy), therapeutic exercise, pain relief and external coaptation. Lectures will be complimented by live animal, hands on laboratories.

**Learning Objectives**
- Understand the regulatory issues surrounding the practice of animal rehabilitation
- Describe basic anatomical differences between the human and the horse.
- Determine basic gaits of the horse and recognize equine lameness
- Understand basic equine conformation
- Understand the equine neurologic examination
- Utilize a Team Approach in equine rehabilitation
- Be familiar with the different therapeutic modalities available to the equine patient
- Know the mechanism of action, application and efficacy of each modality
- Discuss possible outcome measures to determine the effectiveness of the selected therapeutic modality
- Demonstrate knowledge of the potential benefits of various emerging modalities in equine rehabilitation

**Equine - Part II:** Conditions Amenable to Rehabilitation
*(Required for all participants)*

Pre-requisites: Successful completion of Equine - Part I.

**Section 1: Conditions of Tendons and Ligaments**

This section will provide the participant with the basic knowledge of equine tendons and ligaments disorders that are amenable to physical therapy. Response to injury and healing will be reviewed as well as selection of appropriate therapeutic modality. Important concepts introduced in lectures will be reinforced with cadaver limb dissection laboratories.

**Learning Objectives**
- Be familiar with the cause and medical or surgical therapy for conditions of equine tendons and ligaments
- Response to injury and healing of tendons and ligaments
- Determine which conditions are appropriate for physical therapy
- Selection of appropriate therapeutic modality
- Measure response to therapy

**Section 2: Conditions of Bone and Joints**

This section will provide the participant with the basic knowledge of conditions of equine bones and joints that are amenable to physical therapy. Response to injury and healing will be reviewed as well as selection of appropriate therapeutic modality. Important concepts introduced in lectures will be reinforced with cadaver limb dissection laboratories.

**Learning Objectives**
- Be familiar with the cause and medical or surgical therapy for conditions of equine bones and joints
- Response to injury and healing of bone and joints
- Determine which conditions are appropriate for physical therapy
- Selection of appropriate therapeutic modality
- Measure response to therapy

**Section 3: Conditions of the Nervous, Muscle and Integumentary System**

This section will provide the participant with the basic knowledge of conditions of the equine nervous system, muscles, skin and hooves that are amenable to physical therapy. Response to injury and healing will be reviewed as well as selection of appropriate therapeutic modality.

**Learning Objectives**
- Be familiar with the cause and medical or surgical therapy for conditions of nerves, muscle, skin and hooves
- Response to injury and healing of nerves, muscle, skin and hooves
- Determine which conditions are appropriate for physical therapy
- Selection of appropriate therapeutic modality
- Measure response to therapy
Section 3: Special Topics

This section will provide more in depth discussion of topics such as Osteoarthritis and the Equine Athlete and Equine Locomotion and Gait Analysis. Different topics will be rotated and many will be available as advanced modules in the future.

Learning Objectives

- Acquire more in depth knowledge of the topic being presented

Section 4: Program Development and Case Studies

This course will provide the participant with the skills necessary to design and implement a comprehensive rehabilitation program for commonly seen musculoskeletal, integumentary and neurologic conditions in the horse. A case study approach will be utilized teaming students from different professions together during this course to design and implement the rehabilitation programs.

Learning Objectives

- Design and implement a comprehensive rehabilitation program for commonly occurring musculoskeletal, integumentary and neurologic conditions in the horse
- Correlate the rehabilitation program with the physiologic processes that the patient is undergoing during its rehabilitation.
- Discuss reasonable time frames for treatment including when to begin treatment, frequency of treatment, and duration of treatment
- Discuss the need for and the methods of referral and communication between the referring veterinarian and the rehabilitation provider
- Document the rehabilitation programs using standardized forms

Equine - Part III:
Final Examination and Case Presentations

Pre-requisites: Successful completion of Equine Part I and Part II.

Examinations will be administered online. Participants must prepare a written report, for submission, of two clinical equine rehabilitation cases that have required rehabilitation prior to taking the examination. Participants will be given the format for the written submission during Equine - Part B. Students in one of the fields mentioned earlier are not eligible to take this exam until they have successfully completed their degree program.