

# Department of Physical Therapy Hippotherapy Program

Hippotherapy is a physical therapy treatment strategy used at Arkansas State University that utilizes equine movement as part of an integrated intervention program to achieve functional outcomes. Equine movement provides multidimensional movement, which is variable, rhythmic and repetitive. The horse provides a dynamic base of support, making it an excellent tool for increasing trunk strength and control, balance, building overall postural strength and endurance, addressing weight bearing, and motor planning. Equine movement offers well-modulated sensory input to vestibular, proprioceptive, tactile and visual channels. During gait transitions, the patient must perform subtle adjustments in the trunk to maintain a stable position. When a patient is sitting forward astride a horse, the horse's walking gait imparts movement responses remarkably similar to normal human gait. The effects of equine movement on postural control, sensory systems, and motor planning can be used to facilitate coordination and timing, grading of responses, respiratory control, sensory integration skills and attention skills. Equine movement can be used to facilitate the neurophysiologic systems that support all of our functional daily living skills.



The physical therapist directing the sessions can overlay a variety of motor tasks on the horse's movement to address the motor needs of each patient and to promote functional outcomes in skill areas related to gross motor ability such as sitting, standing, and walking. The physical therapist is also able to combine the effects of the equine movement with other standard intervention strategies for working on fine motor control, sensory integration, feeding skills, attention skills, and functional daily living skills in a progressively challenging manner.

All hippotherapy sessions occur on the campus of Arkansas State University at the Equine Center. Students who are currently in the Physical Therapy or Physical Therapist Assistant programs have the opportunity to interact and participate in actual hippotherapy sessions on patients currently involved in research endeavors with trained faculty members. All students interested can volunteer to assist whether they are actually enrolled in the programs or not. Interested parties can email Dr. Aldridge at [raldridge@astate.edu](mailto:raldridge@astate.edu) .

