

	mobility	strength vs tone	balance/posture	ROM	Pain	Endurance	Precautions
CP-Diplegic	ambulatory with or without walker	UE-strength and movement for functional activity LE-tone (stiffness)	on horse better than on the ground. Able to sit unsupported however accurate adjustment limited-- might overshoot when correcting	too much and too little especially in the hips LE might be limited	possible in LE	postural endurance could be impaired	tightness in the LE for mounting and position on the horse- increased stiffness due to gait speeds or tack- important to know how they felt the next day after a riding

Impact on teaching

How will they enter the barn? Climb the mounting block? What gaits and speeds can they handle and maintain seat? What gaits, speeds, tack, terrain impact the tone--(saddle and trot can increase stiffness excessively)? What tack will help to maintain seat or what will make it more difficult to maintain seat? What tack will accommodate the ROM of the LE? What horse will accommodate ROM of LE? What horse will tolerate the pressure of the LE? Does the individual recognize pain? Is the tight LE/tack unit the cause of the pain? How does postural endurance affect riding time? How can you provide active rest?

CP- quadruplegic	use of walker or w/c	typically tonal influences UE/LE- stiffness throughout hand function impacted	unstable, difficulty with trunk and head control adjustment limited-- might overshoot when correcting	variable in UE too little in LE	possible in LE	postural endurance could be impaired	tightness in the LE for mounting and position on the horse- potentially severely limited ability to maintain seat on the moving horse
-------------------------	----------------------	---	---	------------------------------------	----------------	--------------------------------------	--

Impact on teaching

How will they enter the barn? Climb the mounting block? What gaits and speeds can they handle and maintain seat? What tack will help to maintain seat or what will make it more difficult to maintain seat? What gaits, speeds, tack, terrain impact the tone--(saddle and trot can increase stiffness excessively) What tack will accommodate the ROM of the LE? What type of reins will best match hand function? What horse will accommodate ROM of LE? What horse will tolerate the pressure of the LE? Does the individual recognize pain? Is the tight LE/tack unit the cause of the pain? How does postural endurance affect riding time? How can you provide active rest?

	mobility	strength vs tone	balance/posture	ROM	Pain	Endurance	Precautions
Down Syndrome	ambulatory- but unsteady on outdoor surfaces and might easily fall over obstacles	low tone (hypotonic) throughout; weak muscles in the back and gluteal regions	"slumped" -forward head, rounded shoulders, posterior pelvis, LE forward of hips (chair sitting) LE outwardly rotated	Typically excessive except for inward rotation at the hip	limited expression of pain	limited due to postural fatigue	whiplash effect on the atlanto-axial joint; hypermobility throughout-especially in weightbearing positions-elbows in weightbearing when mounting or 2-point

Impact on teaching

What is the surface of the arena, barn, farm areas for safe ambulation? What gaits and speeds can they handle and maintain seat and maintain head without excessive movement? What tack will help maintain seat or make it more difficult to maintain? What tack will most easily allow proper seat/postural alignment-how can I help client with DS bring LE into alignment? What do I need to do to protect the integrity of the hips/shoulders/elbows when mounting/dismounting/emergency exit?

Multiple Sclerosis	Variable-independent with or without assistive device or W/C	typically with stiffness (hypertonia) throughout extremities LE>UE	potentially unstable and unpredictable with limited ability to make fine adjustments	potentially limited especially if in an exacerbation	Variable-needs to be monitored closely	limited due to muscular and postural fatigue	Fatigue, limited balance, impaired sensation in the LE and feet. Safety when standing next to horse as they may not realize how close they are to the horse. Typically HEAT is difficult for individuals with MS
---------------------------	--	--	--	--	--	--	--

Impact on teaching

How will they enter the barn? Climb the mounting block? What gaits and speeds can they handle and maintain seat? What tack will help to maintain seat or what will make it more difficult to maintain seat? What gaits, speeds, tack, terrain impact the tone--(saddle and trot can increase stiffness excessively) What tack will accommodate the ROM of the LE? What type of reins will best match hand function? What horse will accommodate ROM of LE? What horse will tolerate the pressure of the LE? Does the individual recognize pain? Is the tight LE/tack unit the cause of the pain? How does postural endurance affect riding time? How can you provide active rest?