

**Course Objectives**

1. Understand the tri-planar motions of pronation and supination. Identify when these motions should occur in the gait cycle.
2. Describe and understand the bone and joint motion that comprises supination and pronation at the foot and ankle in both front leg and back leg of gait. Participants should be able to articulate specific biomechanics of the calcaneus, talus, forefoot, tibia, fibula, talocrural joint, subtalar joint and midfoot joints in all three planes of motion with both top down and bottom-up drivers.
3. Identify the presence or absence of healthy supination/pronation on a colleague .
4. Properly perform manual techniques in functional positions to improve joint mobility and motor patterns in the foot and ankle.
5. Demonstrate use of wedges to both treat and assess foot and ankle dysfunction . Justify wedging techniques through knowledge of biomechanics and the use of individualized movement diagnosis.
6. Demonstrate ability to test and assess both pronation and supination in functional positions. Delineate tests and exercises for pronation or supination and mobility or stability.
7. Understand muscle function, specifically related to eccentric and simultaneous eccentric/concentric muscle contractions at the foot and ankle. Understand the role of the gastrocnemius, soleus, posterior tibialis and peroneus longus in functional movements such as walking. Describe the role of joint positioning in muscle inhibition/facilitation . Understand the importance of proprioceptor stimulation in function.
8. Compare and contrast functional treatment techniques with current clinical practice guidelines and traditional treatment methods for foot and ankle dysfunction, specifically Achilles tendonitis.
9. Create and design plan of care to address foot and ankle dysfunction using both tissue and movement diagnoses and the Lone Peak Process.
10. Understand the importance of observational movement analysis in the treatment of the foot and ankle.