

Course Dates & Locations

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Certificates of attendance for CEU verification are
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This course is 15 contact hours/1.5 ceu's

This course is 18 contact hours/1.8 ceu's for therapists licensed in Florida, Illinois,
New York, North Carolina or the District of Columbia

BOC Provider #P2047 | IL PT Provider #216000074
FL OT provider #50-1442 | AOTA Provider #4487
NCBTMB Approved Provider #280670-00



The California Physical Therapy Board has approved North American Seminars, Inc. as an approval agency to approve providers offering continuing competency courses. This course meets the standards set forth in section 1399.96 of the California Code of Regulation and is approved for 15.0 hrs, 1.50 CEU's for physical therapy continuing competency license renewal requirements in the State of California, approval # PTNAS-201486 This course meets the ceu requirements specified in the Utah Physical Therapy Practice Act Rule. This course meets the continuing education requirements for OT license renewal in the State of California. This course meets the ceu requirements set forth by the The Nevada Board of Physical Therapy Examiners for 1.5 continuing education units. This course meets the continuing education requirements for physical therapists and physical therapy assistants in the States of Alaska, Colorado, Connecticut, Idaho, Indiana, Massachusetts, Missouri, Montana, New Hampshire, New Jersey, North Carolina, Oregon, Rhode Island, Utah, Vermont, Virginia, Washington and Wisconsin. The AOTA does not endorse specific course content, products or clinical procedures. The Alaska, Arkansas, Delaware, District of Columbia, Illinois, Indiana, Kentucky, Louisiana, Maryland, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, North Carolina, Ohio, Oregon, Oklahoma, Rhode Island, South Carolina, Tennessee, Texas, Vermont and Virginia occupational therapy regulatory boards accept courses presented by AOTA providers to meet the needs of OT continuing educational requirements. NAS is approved by the IDPR for physical therapists and assistants licensed in the State of Illinois-IL Provider #216000074

Call North American Seminars, Inc. if your facility is
interested in hosting one of our courses or if you are
an educator interested in presenting courses with
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The Runner's Rehab Program™



Presented by
Miriam Nelson, MPT, COMT, OCS
North American Seminars, Inc.
1-800-300-5512
Fax 1-800-310-5920
www.healthclick.com

Day One

7:30	8:00	Registration
8:00	9:15	Biomechanics of Walking and Running Gait (Lecture) <ul style="list-style-type: none">• Muscle activity and timing, differentiating walking and running• Foot and ankle anatomy• Normal and abnormal mechanics and effects on 1st ray function• Intrinsic and extrinsic factors for pronation and supination• Foot orthoses management options
9:15	10:15	Assessment of the Foot and Ankle (Lab) <ul style="list-style-type: none">• Rear and forefoot alignment, rear foot excursion test, navicular drop test, hallux limitus testing (structural versus functional), lunge test
10:15	10:30	Break
10:30	11:30	Patellofemoral Pain (Lecture) <ul style="list-style-type: none">• Recent theories of pain generation<ul style="list-style-type: none">-Tissue homeostatis and envelope of function-Intraarticular innervation• Best evidence related to treatment
11:30	12:00	Patellofemoral Taping (Lab) <ul style="list-style-type: none">• Taping for patellofemoral pain and tibial rotation
12:00	1:00	Lunch (on your own)
1:00	2:00	Functional Screening and Core Stability: Review of Literature (Lecture) <ul style="list-style-type: none">• Evidence behind transverse abdominal activation and functional testing• Methods of training segmental trunk control
2:00	3:30	Functional Screening (Lab) <ul style="list-style-type: none">• Stabilizer™ assessment of transverse abdominals, single limb squat, overhead squat test, lateral step down test, in-line lunge test, quadruped extension-rotational stability test, star excursion balance test
3:30	3:45	Break
3:45	4:15	Ankle Taping (Lab) <ul style="list-style-type: none">• Arch taping for plantar fasciitis; midfoot slings, (pronatory and supinatory), Achilles tendinopathy
4:15	5:15	Hip Pain (Lecture) <ul style="list-style-type: none">• Differential diagnosis for hip pain: osteoarthritis (OA), labral tears and femoroacetabular impingement<ul style="list-style-type: none">• Special tests for the hip<ul style="list-style-type: none">- Log roll test, FADIR, Fitzgerald, FABER, resisted SLR, Hip Scour, SIJ provocation cluster
5:15	6:00	Hip Treatment (Lab) <ul style="list-style-type: none">• Hip manipulation/mobilization techniques• Demonstration hip and lumbar taping
6:00	6:15	Summary and Questions

Day Two

8:00	9:00	Common Running Injuries Etiology and clinical Presentation (Lecture) <ul style="list-style-type: none">• Medial Tibial Stress Syndrome• Plantar fasciitis/Heel pain• Achilles Tendinopathy
9:00	9:50	Exercise Progression in the "Posture of Running Creating a criterion Based Algorithm for Running Injuries (Lecture) <ul style="list-style-type: none">• Non Weight Bearing OKC/CKC:"The Missing Link: Segmental Stabilization"• Integrating Stabilizer™ ceus• Foam roller• Weight-Bearing CKC with perturbation• Weight bearing dynamic mvmt.• Weight Bearing Plyometric/Reactive Training• Bridging the gap to return of dynamic gait activities
9:50	10:15	Exercise Progression (Lab) <ul style="list-style-type: none">• Stabilizer™ and foam roller techniques for proprioceptive training
10:15	10:30	Break
10:30	11:00	Video Analysis of Running Gait (Lecture) <ul style="list-style-type: none">• Equipment• Analysis check list• Software options
11:00	11:30	Demonstration with Treadmill Running (Lab)
11:30	12:30	Barefoot Running and Minimalist Shoe Wear (Lecture) <ul style="list-style-type: none">• Ground reaction forces• Component of traditional and minimalist shoe wear• Effects on gait mechanics
12:30	1:30	Lunch (on your own)
1:30	2:15	Gait Manipulation (Lecture) <ul style="list-style-type: none">• Manual/training techniques for postural changes• Cadence training and treating patellofemoral syndrome
2:15	3:00	Patient Scenarios (Lecture) <ul style="list-style-type: none">• Heel pain• MTSS• Chronic hamstring pain
3:00	3:30	Summary and Questions

About the Educator

Miriam Nelson, MPT, COMT, OCS, attended the University of North Carolina at Chapel Hill and graduated with a BS in Biology. She received her Masters of Physical Therapy at East Carolina University. She has practiced orthopedic and sports physical therapy for the last 10 years while residing in Asheville, NC. Miriam specializes in the treatment of running injuries with a background in foot and ankle rehabilitation, orthosis fabrication, and biomechanical analysis of running gait. She is the director/founder of Ground Reaction Runners' Clinic for the improvement of performance and prevention of injury for runners of all ages.

Miriam Nelson has her certification of orthopedic manual therapy (COMT) through Maitland-Australian Physiotherapy Seminars and is an orthopedic certified specialist (OCS) through the American Physical Therapy Association. She has been a presenter on the Current Concepts in Biomechanical Evaluation and Treatment of the Running Athlete 2010 conference, and is a guest columnist for the Asheville Citizen-Times for their outdoor sports section.

Miriam has achieved an incredibly high success rate with her running clientele utilizing this unique algorithm for rehabilitating the injured runner. She was able to develop this process by integrating her background as a Maitland trained specialist and her orthopedic expertise working with runners, gait analysis, foot orthoses, and lower extremity pathology. This treatment approach is the combination of segmental lumbar stabilization, traditional and non-traditional strength and neuromuscular facilitation, and real time gait training. Miriam emphasizes the key goals of identifying the primary drivers of dysfunction, retraining more efficient movement patterns, and constant assessment to ensure criteria are met with each progression of the runner's rehabilitation. This formula makes it possible for runners with very complex and chronic injury histories to return to running with clear goals and training tools to prevent re-injury.

This course is applicable for PT, PTA, ATC, DC, OT

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Why You Should Attend This Course

Treatment of the runner is a complex and sometimes an involved process dealing with the interaction of physical and ideological components. This intermediate level course is founded on an evidence based approach for comprehensively evaluating and dynamically treating the running athlete. The focus of this two day seminar will be to identify the mechanisms responsible for inefficiency and injury during a client's first treatment session and develop evidence based treatment approaches. This course will provide a clear outline for performing functional screening techniques applicable to any clinical setting. Foot and ankle assessment will be presented, including evaluation of rear and forefoot alignment, internal and external drivers of foot posture, and passive and active mobility testing. Foot posture and function will also be correlated to shoe wear and orthoses prescription. A very unique perspective will be taught regarding the assessment of segmental core stability with running patients. Techniques will be demonstrated using manual cueing and Stabilizer™ biofeedback to facilitate core stability for simple and concise patient education. A specific exercise algorithm and home program will be presented for correcting movement dysfunctions and smoothly transitioning stance phase stability into more dynamic gait patterns. A portion of this course is dedicated to manual treatment approaches that are effective for immediate improvements with function and management of symptoms, including both taping and mobilization/manipulation of the ankle, knee, and hip joint. Specific running pathologies will be addressed, including hip pain, patellofemoral pain, Achilles tendinopathy, plantar fasciitis, and medial tibial stress syndrome. The current literature will be reviewed regarding the trends of barefoot running and minimalist footwear. Video analysis will be presented to allow more dynamic evaluation of lower extremity function. Gait manipulation techniques will be taught including cadence training and verbal cueing. This course is essential for attaining the knowledge base and manual skills needed for the success in treating the running athlete and is designed with the role of the clinician in mind, with easily applicable tools for treatment for even the busiest rehabilitation settings. The information presented in this course is based in part on the newest research generated by the top gait analysis labs in the country. Miriam has modeled her approaches to gait dysfunction based on the concepts advocated by researchers from both the Center for Endurance Sport at UVA and the Spaulding National Running Center at Harvard University.

Course Objectives

Upon completion of this course, participants will be able to:

- Describe biomechanical differences between running and walking gait.
- Understand the current literature to ascertain the functional definition of core stability.
- Demonstrate how to objectively assess core strength with running athletes, and train patients for improved self awareness for lumbopelvic stability.
- Conduct thorough evidence based functional screening techniques to identify biomechanical faults of the injured runner. Techniques include lateral step down test, lunge test, functional movement screening, active hip abduction test, pelvic firing pattern assessment, swing test, and star excursion balance test.
- Perform taping techniques for plantar fasciitis, Achilles tendonopathy, knee pain and low back pain.
- Illustrate foot and ankle anatomy and biomechanical drivers of underpronation and overpronation.
- Perform foot and ankle screening techniques including navicular drop tests, rearfoot excursion test, active heel raise test, functional hallux limitus test and Jack's test.
- Discuss the concepts of barefoot, minimalist, and traditional shoe wear running and how these trends impact lower extremity kinematics, ground reaction forces, and running posture.
- Develop an evidence based algorithm for exercise prescription specific to running biomechanics, frontal and transverse plane kinematics, and lower extremity pain syndromes.
- Perform mobilization/manipulation techniques to restore joint motion and decrease pain with running specific pathologies for the ankle, knee and hip. Techniques include talocrural joint, proximal tibiofibular joint, and hip joint mobilization/manipulation.
- Discuss the etiology and differential diagnosis of the most common running injuries including medial tibial stress syndrome, heel and plantar fascia pain, hip pain, and Achilles tendinopathy.
- Perform real time facilitation techniques to modify running form to decrease mechanical forces responsible for injury.
- Understand basic concepts of video analysis of running gait and be able to apply gait analysis to the clinical setting.
- Perform differential diagnosis of hip pain and screen tests for labral tears, femoroacetabular impingement (FAI) and osteoarthritis.
- Discuss newer concepts in pain generators for patellofemoral pain syndrome.

Registration Form

Nelson 12

The Runners Rehab Protocol

Course Tuition: \$450

Send tuition to: North American Seminars, Inc.
 2000 Mallory Lane Suite 130-67 Franklin, TN 37067
 1-800-300-5512 Fax 1-800-310-5920 www.healthclick.com



Name _____ Profession _____

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Exp.date _____ Phone (required) _____

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Location of attendance _____

All cancellations must be submitted with written notice and received 14 days prior to the course date. Refunds and transfers minus the deposit fee of \$75.00 are provided until 14 business days prior to the course date. No refunds will be issued if notice is received after 14 days prior to the course date. North American Seminars, Inc. reserves the right to cancel any course and will not be responsible for any charges incurred by the registrant due to cancellation. A full course tuition refund will be issued if NAS cancels the course. NAS reserves the right to change a course date, location or instructor. No refund will be issued if course is in progress and is interrupted by an Act of War or God or issue beyond our control. NAS, Inc. will not be responsible for any participant expenses other than a course tuition refund for course cancellations.