#### Course Dates & Locations

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# **Stroke** Rehabilitation

An Integrated Functional Movement Approach





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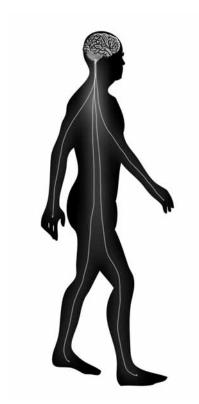
#### **Online Continuing Education Courses**

Pre-approved for Continuing Education www.healthclick.com/physical-therapy-online.cfm

Certificates of attendance are provided upon successful completion of the course. This course is 15.0 contact hours/1.5 CEUs

This course is 18.0 contact hours/1.8 ceus for FL, NY, II, NC or DC licensed therapists.

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 16.0 hrs, 1.50 CEU's for physical therapy continuing competenc5 license renewal requirements in the State of California, approval # PTNAS-201477. This course meets the continuing education requirements for OT license renewal in the State of California. The Nevada Board of Physical Therapy examiners has approved this course for 1.5 continuing education units. This course meets the ceu requirements specified in the Utah Physical Therapy Practice Act Rule. NAS is approved by the IDPR for physical therapists licensed in the State of Illinois. This course meets the continuing education requirements for physical therapists in the States of Alaska, Colorado, Connecticut, Idaho, Indiana, Massachusetts, Missouri, Montana, New Hampshire, North Carolina, Oregon, Rhode Island, Utah, Vermont, Virginia, Washington and Wisconsin. North American Seminars, Inc. is an AOTA provider for continuing education, provider #4487. 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 courses are approved in North Carolina for continuing competency requirements for physical therapist license renewal. The New York State Education Department, Office of the Professions has approved NAS as a continuing education sponsor for physical therapists and assistants licensed in New York. FL OT Provider number 50-1442. BOC provider #P2047



An Evidence-Based Course

Presented by John Wilson, PT, DPT, MA, CSCS

**North American Seminars, Inc.** 1-800-300-5512 Fax 1-800-310-5920 www.healthclick.com

### Day One

		J			,
7:30 8:00	8:00 9:00	Registration Introduction/Stroke Overview • Orthopedic concerns of the neurologic patient (Lab)	8:00	9:00	Upper Extremity Function- Reaching • Scaption (Lab) • Depression scoot
9:00	10:00	<ul> <li>Motor Control</li> <li>Movement</li> <li>Developmental sequence</li> <li>Pelvis/hip disassociation mobility/stability (Lab)</li> </ul>	9:00	10:00	<ul> <li>Scapula mobilization/ stabilization (Lab)</li> <li>Trunk Mobility</li> <li>Trunk mobility integration</li> </ul>
10:00 10:15	10:15 12:00	Static Stability Corrections  Core stabilizers function reflexively to maintain posture	10:00	10:15	<ul> <li>Seated weight shifting, ROM, pelvic and scapula mobilization (Lab)</li> <li>Break</li> </ul>
		<ul> <li>Static stability</li> <li>PNF Applications</li> <li>Basic PNF (Lab)</li> <li>Chop/Lift (Lab)</li> </ul>	10:15	12:00	<ul><li>The Shoulder in Hemiplegia</li><li>Loss of muscular control</li><li>Altered patterns</li><li>Establishing weight bearing</li></ul>
12:00 1:00	1:00 1:30	<ul> <li>Lunch (on your own)</li> <li>PNF Applications (Continued)</li> <li>Bridge facilitation, assistance, corrections, bed mobility (Lab)</li> </ul>			<ul> <li>Shoulder: conscious loading of the shoulder (Lab)</li> <li>Mobility</li> <li>A simple flexion-extension</li> </ul>
1:30	3:00	<ul><li>The Core</li><li>Anatomy</li><li>Recruiting global reflexive firing patterns</li></ul>	12:00	12:45	<ul> <li>pattern?</li> <li>Eccentric force control precedes concentric force control</li> <li>Lunch (on your own)</li> </ul>
		<ul> <li>Core facilitation (Lab)</li> <li>Hip PNF sequence with preloading</li> <li>Evidence Based Medicine</li> </ul>	12:45	1:30	Mobility Lab (continued)  • How to squat  • How to set up orthopedically neurologically STS (Lab)
		- Stroke strengthening research	1:30	3:15	Gait
3:00 3:15	3:15 3:45	Break Evidence Based Medicine (Continued) • Forced use paradigm • Gait unloading			<ul> <li>Is your patient ready for gait training?</li> <li>Fundamental building blocks gait</li> <li>Gait Ther-ex (Lab)</li> </ul>
3:45	4:30	<ul> <li>Rolling</li> <li>Motor control and segmental sequencing</li> <li>Fundamental reflex stabilization</li> <li>Rolling (Lab)</li> </ul>			When Your Feet Hit the Gro How Does Your Body React?  • Drive the feet into the ground load pelvis 3-D  • Why retro-gait?
4:30	5:00	<ul><li>Quadruped</li><li>Quadruped is pre-gait</li><li>Rotational stability</li><li>Quadruped (Lab)</li></ul>	3:15	3:30	<ul> <li>Gait foot work (Lab)</li> <li>Summary/Conclusion</li> </ul>
5:00	6:00	Normal Upper Extremity Mechanics • Scapulohumeral rhythm			

#### Day Two

.30	0.00	Registration	0.00	9.00	opper Extremity runction-
:00	9:00	Introduction/Stroke Overview			Reaching
		<ul> <li>Orthopedic concerns of</li> </ul>			<ul><li>Scaption (Lab)</li></ul>
		the neurologic patient (Lab)			Depression scoot
:00	10:00	Motor Control			<ul> <li>Scapula mobilization/</li> </ul>
		<ul> <li>Movement</li> </ul>			stabilization (Lab)
		<ul> <li>Developmental sequence</li> </ul>	9:00	10:00	Trunk Mobility
		<ul> <li>Pelvis/hip disassociation</li> </ul>			Trunk mobility
		mobility/stability (Lab)			integration
0:00	10:15	Break			Seated weight
0:15	12:00	Static Stability Corrections			shifting, ROM, pelvic
		Core stabilizers function			and scapula mobilization
		reflexively to maintain posture	10:00	10.15	(Lab) Break
		Static stability	10:00	12:00	
		PNF Applications	10.13	12.00	Loss of muscular control
		Basic PNF (Lab)			Altered patterns
		• Chop/Lift (Lab)			Establishing weight bearing
2:00	1:00	Lunch (on your own)			Shoulder: conscious loading
:00	1:30	PNF Applications (Continued)			of the shoulder (Lab)
		Bridge facilitation, assistance,			Mobility
		corrections, bed mobility (Lab)			<ul> <li>A simple flexion-extension</li> </ul>
:30	3:00	The Core			pattern?
		<ul> <li>Anatomy</li> </ul>			<ul> <li>Eccentric force control</li> </ul>
		Recruiting global reflexive firing			precedes concentric force
		patterns			control
		<ul> <li>Core facilitation (Lab)</li> </ul>	12:00		Lunch (on your own)
		- Hip PNF sequence with	12:45	1:30	Mobility Lab (continued)
		preloading			How to squat
		Evidence Based Medicine			How to set up orthopedically and     To the set up orthopedically and     To the set up orthopedically and
		- Stroke strengthening research	1:30	2.15	neurologically STS (Lab) Gait
:00	3:15	Break	1:30	3:15	Is your patient ready for gait
:15	3:45	Evidence Based Medicine			training?
		(Continued)			Fundamental building blocks of
		Forced use paradigm			gait
		Gait unloading			• Gait Ther-ex (Lab)
:45	4:30	Rolling			When Your Feet Hit the Ground
		Motor control and segmental			How Does Your Body React?
		sequencing			Drive the feet into the ground to
		Fundamental reflex stabilization			load pelvis 3-D
		<ul><li>Rolling (Lab)</li></ul>			<ul><li>Why retro-gait?</li></ul>
:30	5:00	Quadruped			<ul><li>Gait foot work (Lab)</li></ul>
-		Quadruped is pre-gait	3:15	3:30	Summary/Conclusion
		Rotational stability			
		• Quadruped (Lab)			
:00	6:00	Normal Upper Extremity			

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#### About the Educator

John Wilson, PT, DPT, MA, CSCS, earned his Masters degree in Physical Therapy from Loma Linda University in 1998. He has been an exercise physiologist for the past 19 years, earning a Masters degree in Applied Exercise Physiology from San Diego State University in 1993. John completed his Post Professional Clinical Doctorate of Physical Therapy program at Western University of Health Sciences in 2005. Dr. Wilson is also a Certified Strength and Conditioning Specialist through the National Strength and Conditioning Association.

Early in his career John focused on outpatient orthopedics and performance training. He spent two years as a research assistant at The Kasch Exercise Physiology Laboratory conducting performance testing/ training of professional athletes (including the NFL Chargers) and exercise prescription of seniors in a community wellness program. His research at the lab with cyclists was subsequently published entitled "Thermoregulatory Effects of Cycling in a Hyperconvective Environment". Though still actively working with athletes, John's emphasis the past decade has focused on geriatric orthopedics and neurological movement disorders. Working with geriatrics in the LTC/ SNF and outpatient setting has been rewarding. Having completed advanced coursework in neurological rehabilitation and gait, he noted an immediate improvement in his neuro, orthopedic and sports medicine outcomes. John has been providing geriatric strength training, mobility and movement patterns courses nationally since 2004.

His current working environment is as an Outcomes Manager for a large medical system. He utilizes outcomes research, evidence-based practice and professional experience to ensure efficient and effective outcomes for rehabilitation patients. Utilizing dynamic movement analysis. progressive resistive strength training, manual therapy and prescribed corrective exercises; Dr. Wilson has brought his performance approach to the geriatric population.

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## Why You Should Attend This Course

Physical and Occupational Therapists and Assistants treat patients and their impairments, not the diagnosis. Understanding the underlying mechanisms of a stroke diagnosis will enhance the therapists ability to determine specific rehab needs of the patient. This course, with applications for patients in all therapy settings, will focus on the movement re-education needs required for basic daily function of the patient from an integrated approach based on neurologic science and orthopedics. This intermediate level course combines lecture and extensive lab time designed for participants to practice motor skills covered in lecture that will immediately enhance a clinician's ability to treat this population.

Historic and modern approaches to stroke rehab such as: motor control theory, PNF, NDT, strength training, forced use paradigm, mobility and gait unloading and training will all be integrated into this movement training approach. Orthopedic concerns of the neurological patient and the hemiplegic shoulder will also be addressed.

This course provides a systematic movement re-education treatment approach. Concepts presented will teach you how to utilize the fundamental movement patterns of the neurodevelopmental sequence to view mobility and static/dynamic stability problems in a more isolated setting. You will learn how to identify a patient's most dysfunctional movement pattern following stroke, or any other movement disorder, and reduce that pattern into its many underlying mobilizing and stabilizing actions and reactions that constitute function. As demonstrated in the labs, movement patterns can be assisted and facilitated, corrected (with manual therapy and prescribed proprioceptively enriched therapeutic exercise), and progressed. After completion of this course, the participant will have the information needed to evaluate and treat movement dysfunction. Participants will leave this course with a safe, progressive and evidence-based approach to allow for strong therapy outcomes regardless of therapy background or treatment setting.

# Course Objectives

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

- Identify how to analyze, correct and progress movement patterns.
- Develop and perform a complete evaluation approach linking movement assessment findings to functional patterns.
- Discuss evidence-based practice for strength training, forced use, body weight supported therapies and virtual reality and how they relate to the stroke patient population.
- Describe the scientific and clinical rationale behind the development of an exercise program for the treatment of functional mobility in the stroke population.
- Demonstrate the proper utilization of the fundamental movement patterns of the neurodevelopmental sequence to view mobility and static/dynamic stability problems in a more isolated setting.
- Learn how to identify a patient's most dysfunctional movement pattern following stroke, reduce that pattern into its many underlying mobilizing and stabilizing actions and reactions that constitute function.
- Describe how neuromusculoskeletal dysfunction can lead to impaired motor control and movement patterns.
- Understand how to utilize neuromuscular inhibition and facilitation techniques and how to sequence them in therapy prescriptions for maximum functional outcomes.
- Develop home exercise programs of prescribed fundamental movement patterns to maintain functional results.

# Form Registration

Address

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Send tuition to: North American Seminars, Inc. 2000 Mallory Lane Suite 130-67 Franklin, TN 370

Zip State (required) Phone Location of attendance e-mail (required) **Credit Card** Exp.date Cif