

2014 Course Dates & Locations

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Certificates of attendance are provided upon successful completion of the course.  
This course is 16 contact hours, 1.6 ceu's/16 ccu's  
19 contact hours/1.9 ceu's for therapists licensed in Florida,  
New York, Illinois or the District of Columbia

BOC provider #P2047  
California approval # PTNAS-201625  
IL provider #216000074

This course is applicable for PT, PTA and ATC. This course meets the standards set forth in section 1399.96 of the California Code of Regulation and is approved for 16.0 hrs, 1.60 CEU's for physical therapy continuing competency license renewal requirements in the State of California, approval #PTNAS-201625. This course can be used for continuing education requirements the ceu requirements set forth by the Nevada of Physical Therapy Examiners for 1.5 units of continuing education. This course can be used for continuing education requirements the ceu requirements set forth by the Texas Board of Physical Therapy Examiners for 1.6 units of continuing education, 16 ccu's. This course meets the ceu requirements specified in the Utah Physical Therapy Practice Act Rule. This course meets the continuing education requirements for physical therapists in the States of Alaska, Colorado, Connecticut, Delaware, Idaho, Indiana, Massachusetts, Missouri, Montana, New Hampshire, New Jersey, North Carolina, Oregon, Rhode Island, Utah, Vermont, Virginia, Washington and Wisconsin. This course meets the requirements set forth by the Virginia Board of Physical Therapy. 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. NAS is approved by the IDPR for physical therapists licensed in the State of Illinois. IL Provider # 216000074. 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.

Advanced  
Management  
of the Lumbar  
Spine and  
Pelvic Girdle  
Improving Your Outcomes with a  
Comprehensive Approach



Presented by  
Robert Friberg, PT, PhD, CFMT

North American Seminars, Inc.  
1-800-300-5512 | Fax 1-800-310-5920  
[www.healthclick.com](http://www.healthclick.com)

PT, PTA and ATC - Continuing Education Course

Day One

- 7:30 8:00 Registration  
8:00 9:30 Theoretical Foundation for Neuromechanical Evaluation and Intervention
- Characteristics of neuromechanical dysfunction
  - Components of neuromechanical dysfunction
  - Examples of lower quarter neuromechanical dysfunction
- 9:30 10:30 Neuromechanical Screen
- Rationale for a neuromechanical screen (lecture)
  - Lab: practice the neuromechanical screen
- 10:30 10:45 Break  
10:45 12:00 Examination and Intervention for Lumbar/Pelvic Muscle Dysfunction
- Evidence for selected muscle inhibition associated with lumbopelvic spine dysfunction (lecture)
  - The role of the "lower-crossed" pattern in neuromechanical dysfunction of the lumbosacral spine (lecture)
  - Strategies for examination and intervention (lecture)
  - Lab: specific assessment and intervention activities
  - Lab: examination, evaluation and intervention of muscle dysfunction associated with the lumbopelvic spine
- 12:00 1:00 Lunch (on your own)  
1:00 2:00 Examination and Intervention for Lumbar/Pelvic Muscle Dysfunction (con't.)
- 2:00 3:00 Intervention for Sympathetic Nervous System Dysfunction (Lecture)
- The role of the sympathetic nervous system in lumbopelvic spine dysfunction
  - Strategies for intervention
- 3:00 3:15 Break  
3:15 4:45 Neurodynamics of the Lower Quarter
- Concepts and principles of neurodynamic examination and intervention (lecture)
  - Strategies for intervention (lecture)
  - Lab: examination and intervention for lower quarter neurodynamic dysfunction
- 4:45 6:00 PNF: The Role in Neuromechanical Rehabilitation
- Neuromechanical foundation of PNG (lecture)
  - Pelvic girdle patterns (lecture/lab)
  - Rolling (lecture/lab)

Day Two

- 8:00 12:00 Strategies for Improving Lumbopelvic and Hip Motion
- Muscle Energy Technique: A Neuro Mechanical Perspective (lecture)
- Review the theory of using MET for spinal dysfunction. (lecture)
  - Develop a rationale for use as a neurophysiologic intervention. (lecture)
  - Lab: specific assessment and intervention activities
  - Neuromechanically Organized Mobilization
  - Principles for intervention (lecture)
  - Lab: Lumbar spine, Pelvic Girdle, Hip
- 12:00 12:30 Lunch (on your own)  
12:30 1:30 The Role of Primitive and Postural Reflex Dysfunction in Lumbopelvic Spine Neuromechanical Dysfunction
- Examine the development and role of reflexes (lecture)
  - Identify the primitive and postural reflexes that are relevant for lumbo pelvic dysfunction. (lecture)
  - Lab: specific assessment and intervention activities
- 1:30 2:30 Vestibular System Dysfunction and the Lower Quarter
- Explore the relationship between the lumbopelvic spine and vestibular system. (lecture)
  - Lab: specific assessment and intervention activities
- 2:30 3:30 Motor Learning: Principles for Lower Quarter Dysfunction
- Fundamentals of motor learning and motor control (lecture)
  - Characteristics of an effective physical therapy intervention for movement dysfunction (lecture)
  - Specific strategies for lumbopelvic spine and lower quarter movement dysfunctions (lecture/lab)
- 3:30 4:00 Clinical Application and Summary

# About the Educator

**Robert Friberg, PT, PhD, CFMT** is a professor in the Physical Therapy Program at Hardin-Simmons University. He teaches the kinesiology and orthopedics components of the curriculum. His clinical certification is the Certified Functional Manual Therapist© from the Institute of Physical Art. Dr. Friberg brings 35 years of clinical experience with a specialization in chronic pain associated with spinal dysfunction. His training includes experience with a variety of models for orthopedic practice. This experience led to a unique perspective for examination, evaluation and intervention of movement dysfunction associated with the spine. He has taught nationally on topics associated with the spine including manual therapy, motor control and stabilization. He has provided systematic spinal dysfunction training for national physical therapy groups. He has numerous clinical and research presentations at national meetings. His research interests include such topics as neurodynamics, the neuromechanical effects of posture, the relationship of reflexes in spinal dysfunction, and the role of muscle inhibition and facilitation in spinal movement dysfunction. Dr. Friberg currently has a private practice with consistent patient interaction.

## Available Orthopedic Home Study

Pre-Approved for Physical Therapists, and Physical Therpay Assistants  
**Examination and Treatment of the Hip Joint DVD**

- Narrated and demonstrated by Michael Reiman PT, DPT, OCS, SCS, ATC, FAAOMPT, CSCS
- Filmed in HD with professional DVD and online course (extra option available for CME at [www.healthclick.com](http://www.healthclick.com))
- An advanced educational program featuring examination and treatment techniques of the hip joint.
- Step by step discussion of twenty-six examination techniques of the hip joint.
- Thirty one treatment techniques, including fourteen mobiliza tions are detailed with expert narration.
- Develop an evidence based treatment program for specific dysfunctions of the hip by mastering these examination and treatment techniques.
- More information at [www.healthclick.com/courses/NAS260.php](http://www.healthclick.com/courses/NAS260.php)

DVD with registration: **\$79.95** regularly, \$89.95. Free shipping to course site with course registration. Earn an extra 10.0 ceus for an additional \$99.95. Home Study can be purchased and completed online, visit [www.healthclick.com/courses/NAS260.php](http://www.healthclick.com/courses/NAS260.php) for more information.

Add the Home Study and earn an extra 10 contact hours/1.0 ceus  
CA PT approval # PTNAS-201616, NV PT Board approved for 1.0 units, 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. IL, DC and NY, approved for 12 contact hours.

**A Must-Have Reference Tool for Therapists**  
**Treating Low Back and Lower Extremity Dysfunction**

# Why You Should Attend This Course

Lumbopelvic and hip movement dysfunction represent a large component of physical therapy practice. Yet many of us struggle with explaining how some patients improve and others do not. Developing a perspective regarding the nature of movement dysfunction is the key to improving outcomes. Movement dysfunction should be conceptualized as dysfunction within or between the body's biomechanical and neuromechanical systems. Biomechanical dysfunction refers to abnormalities of the musculoskeletal system including the osteokinetics and arthrokinematics associated with creating movement. Neuromechanical dysfunction refers to abnormalities associated with the anatomy and physiology of the central, peripheral, and autonomic nervous systems influencing movement. The effective intervention for lumbopelvic spine and lower quarter movement dysfunction must integrate all anatomic/physiologic components of the lumbopelvic spine and lower quarter and be multi-system in scope. In other words, the intervention must integrate a biomechanical and neuromechanical perspective.

This two-day, advanced level course provides a unified biomechanic and neuromechanic model with strategies for the examination, evaluation, and intervention of the lumbopelvic spine and hip. The information presented in this course enables the clinician to utilize a new representation of the underlying mechanisms that contribute to lower quarter movement dysfunction. Much lumbopelvic dysfunction is unrecognized secondary to the traditional biomechanical examination and evaluation paradigms. Content for this course includes significant discussion of the scientific basis and rationale for an integrated biomechanical and neuromechanical orientation for rehabilitation. The course incorporates lecture with substantial laboratory experiences. Laboratory sessions enable the participants to integrate both biomechanical and neuromechanical examination and intervention techniques and strategies for neuromechanical system components associated with movement dysfunction. These include for the nervous system, neurodynamics and the sympathetic component of the autonomic nervous system; the role of muscle facilitation and inhibition associated with the lumbosacral spine and hip; the vestibular system and motor learning. The use of a muscle energy technique is developed and implemented from a biomechanical and neuromechanical outlook.

The strategies developed for examination and intervention provided in this course work well with traditional approaches used for intervention of movement dysfunctions. Course information is immediately relevant and applicable in the clinical setting. Additionally, the concepts and principles learned in this workshop transfer to all movement dysfunction.

## Course Objectives

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

- Understand and describe the foundation for neuromechanical examination, evaluation and intervention techniques for the lumbopelvic region.
- Describe the components of, and complete, a neuromechanical screen of the lower quadrant.
- Recognize the role of the sympathetic nervous system in chronic pain and movement dysfunction.
- Describe the mechanical and physiologic functional implications associated with movement of the nervous system and implement an examination to differentiate compression, sliding or tension dysfunctions.
- Integrate concepts and principles of motor control with the fundamentals of neuromechanical dysfunction.
- Explain inhibition and facilitation of lumbopelvic and lower quarter muscle dysfunction in the context of Janda's "lower-crossed" model.
- Describe the sequence of normal reflex development and assess the presence or absence of reflexes in the context of lumbopelvic and lower quarter movement dysfunction.
- Describe the basic concepts and principles associated with the use of PNF.
- Explain the relationship between the vestibular system and lumbopelvic spine movement dysfunction.
- Explain the neuromechanical rationale for using a MET and integrate the MET with PNF to facilitate motor learning and control.
- Utilize a neuromechanically organized mobilization to facilitate lumbopelvic segmental and extrasegmental motion.
- Develop a comprehensive treatment approach to improve functional outcomes for lumbopelvic dysfunction

Friberg14

## Registration Form

**Advanced Management of the Lumbar Spine and Pelvic Girdle**  
**Course Tuition: \$450**  
**\$529.95 with Hip DVD**  
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](http://www.healthclick.com)**



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|                        |                  |
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| Credit Card            | Zip              |
| Exp.date               | Phone (required) |
| e-mail (required)      |                  |
| 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.