

Kinesiologic and Anatomic Foundations of the Shoulder: From Reach to Weight Bearing

Presented by: Donald A. Neumann PT, Ph.D, FAPTA
Professor at Marquette University

Friday, October 13, 2017
8:30am – 4:30pm

Sponsored by: Arlington Pediatric Therapy Management Services,
Ltd/Arlington Rehabilitation for Sports & Orthopedic Injuries
3105 North Wilke Road, Suite H
Arlington Heights, IL 60004

Course Description

This one-day lecture-based course will explore the important structural and functional relationships that relate to movement and stability of the shoulder region. Clinicians are well aware of the principle that proximal stability of the upper limb is essential to the effective movement throughout the entire upper limb. This course will explore the many mechanical and anatomic features that support and explain this principle. This in-depth presentation will provide an excellent foundation for clinical evaluation and treatment of the entire upper quarter of the body, including the elbow and forearm. The concepts discussed in this course will provide a foundation for a wide range of clinical practices, from pediatrics to geriatrics, from both neurologic and orthopaedic perspectives.

This course is presented through lecture and demonstration, enhanced by videos of joint fluoroscopy as well as videos and images of persons with specific or global muscle weakness or poor neuromuscular control of the shoulder. In addition, the presentation will show cadaver images, unique models, and many illustrations taken from the textbook: Neumann DA: *Kinesiology of the Musculoskeletal System: Foundations for Physical Rehabilitation*, 3rd edition (Elsevier 2017). These illustrations clearly describe the anatomic and mechanical basis for ideal and abnormal shoulder movement and posturing. A clear, organized, visual perception of this topic should stimulate further professional growth and interest in this important area of the body.

Through Arlington Pediatric Therapy, 6.5 contact hours (.65 CEUs) will be awarded upon completion of this course for physical and occupational therapists through the Illinois Department of Financial and Professional Regulation (Licenses: PT: 216000097; OT: 224-0000370). Illinois Early Intervention 6.5 credit hours in Intervention.

Course Objectives

After this course, participants shall be able to:

1. Describe the detailed structural and functional relationships of the joints of the shoulder complex.
2. Describe the general structure and function of the elbow and forearm joints.
3. Cite the muscular derive and normal synergies that operate in the healthy shoulder.
4. Cite the primary peripheral innervation to the muscles of the shoulder, including the brachial plexus.
5. Describe how the shoulder operates to achieve maximal reach of the upper limb as well as a source of power for weight bearing throughout the upper limb.
6. Explain the pathokinesiologic mechanics behind several orthopedic and neurologic conditions of proximal and mid upper extremity.
7. Incorporate kinesiological principles to guide evaluation and treatment choices for neuro-musculoskeletal pathological conditions of the shoulder.

Course Instructor

Donald A. Neumann, PhD, PT, FAPTA: Dr. Neumann received a B.S. in physical therapy from the University of Florida. After several years of practice and teaching in the area of rehabilitation of persons with spinal cord injury, he received a Ph.D. in Exercise Science from the University of Iowa. In 1986, he joined Marquette University where he is currently Professor in the Department of Physical Therapy. Don has received multiple awards from the American Physical Therapy Association that have recognized his teaching, writing, and research efforts, including being named a Catherine Worthingham Fellow of the APTA in 2008. Dr. Neumann received a Teacher of the Year Award at Marquette University, and was named Wisconsin's College Professor of the Year by the Carnegie Foundation. In 2015, he was awarded the Educational Service Award by the World Confederation of Physical Therapy (WCPT). Dr. Neumann has received Fulbright Scholarships to teach in Lithuania, Hungary, and Japan. He is the author of *Human Kinesiology: Foundations for Rehabilitation*, published by Elsevier, 2010, and co-author of *Essentials of Kinesiology for the Physical Therapist Assistant*, Elsevier, 2009. In 2005, Dr. Neumann authored a chapter on the Hip, published in the 41st edition of British Gray's Anatomy. Donald served as an Associate Editor of JOSPT from 2002-2015.

Course Agenda

- 8:30 – 10:00: Clinical Kinesiology of the Shoulder Complex, Arthrology and Anatomy
10:00 – 10:15: Break
10:15 – 12:00: Finish Arthrology, Introduce Scapulothoracic Musculature
12:00 – 1:00: Lunch (on your own)
1:00 - 2:30: Muscles & Function of Entire Shoulder Complex: Maximizing Reach of the Upper Limb
2:30 – 2:45: Break
2:45 – 4:15: Overall Upper Limb Kinesiology Involving the Shoulder, Elbow, & Forearm
4:15 – 4:30: Questions and Discussion

Registration Form for Kinesiologic and Anatomic Foundations of the Shoulder: From Reach to Weight Bearing

Course Date: Friday, October 13, 2017

Course Times: 8:30 am – 4:30 pm Registration begins at 8:00am

Course Location: Arlington Pediatric Therapy Management Services, Ltd
3105 North Wilke Road, Suite H
Arlington Heights, IL 60004 (Use the Waze app to find us)
847-255-8690

(Use the main entrance please and avoid parking close to the entrance for our clients' convenience)

Course Tuition: \$185

(Includes tuition, materials, continental breakfast, and afternoon snack. Lunch is on your own.)

Please register by returning the form below with your check made payable to Arlington Pediatric Therapy Management Services, Ltd. (or APTMS, Ltd.). Or for credit card payment go to www.arlingtonpediatrictherapy.com. Click on Register for Class then Continuing Education. Use code 12345 where it asks for an account number.

Name _____

Profession _____

Address _____

City _____ **State** _____ **Zip** _____

Phone _____

E-mail _____

How did you hear about this course? _____

****Cancellations:** \$30 retained to cover processing costs. No refunds 5 days prior to course.

****Questions:** Please contact Amy Lumsden at 847-255-8690 ext 511 or amylumsden@comcast.net.

****Mail Registration with payment to:**

Arlington Pediatric Therapy Management Services, Ltd. or APTMS, Ltd
3105 N. Wilke, Suite H
Arlington Heights, IL 60004
Attn: Amy Lumsden