

# Foundations in Dry Needling for Orthopedic Rehab and Sport Performance

## Course Description

In this 25-hour lab-based course, the clinician will learn a diagnosis-focused approach to dry needling. The clinician will learn fundamental skills necessary for safe and proper needle insertion and removal, as well as effective strategies to manage commonly encountered pathologies in orthopedic and sport rehabilitation. Safety considerations are emphasized. Current science and research will be presented, along with a vast amount of clinical experience and pearls, allowing immediate application of dry needling into the clinicians' professional practice. The use intramuscular electrical stimulation will also be discussed, demonstrated and practiced in class.

**\*\*Attendance Policy** – Prior to registering for the course, make sure you are able to attend the entire weekend. Exceptions to this rule will not be allowed. For more details, please see below.

## Course Details

**Areas of the body to be covered in class include:**

- Upper extremity
- Lower extremity
- Cervical spine (C2-C7)
- Lumbar spine (L3 and below)
- Face and Head

## Course Objectives:

Upon course completion, the clinician will:

- Adhere to safe needling techniques, including universal precautions and blood borne pathogen education per the CDC and/or OSHA given a specific case study.
- Integrate surface anatomy palpation and layered anatomy application for safety considerations when inserting a dry needle into a patient given a specific case study.
- List contraindications and precautions for dry needling and intramuscular electrical stimulation application.
- Master application of dry needling techniques for common orthopedic pathologies and sport related dysfunctions given a specific case study
- Master application of intramuscular electrical stimulation for the common orthopedic pathologies and sport related dysfunctions given a specific case study.
- Given a specific case study, correctly integrate dry needling and intramuscular electrical stimulation into the overall treatment program.
- Pass a written and practical exam

## Prerequisites

A professional education and license that allows you to perform dry needling as a health care professional

## Professionals who may take this course include:

- Athletic Trainers
- Physical Therapists
- Chiropractors
- Medical Doctors
- Doctors of Osteopathic Medicine
- Physician Assistants
- Registered Nurses
- Nurse Practitioners
- Acupuncturists

## Required Reading:

1. **Physiologic Effects of Dry Needling.** Barbara Cagnie
  - [Cagnie, B, Dewitte, V, Barbe, T, Timmermans, F, Delrue, N, and Meeus, M. Physiologic Effects of Dry Needling. Curr Pain Headache Rep 17, 2013](#)
2. **Dry needling: a lit review with implications for clinical practice.** James Dunning
  - [Dunning J, Butts R, Mourad F, Young I, Flannagan S, Perreault T. Dry needling: a literature review with implications for clinical practice guidelines. Phys Ther Rev. 2014 Aug;19\(4\):252-265.](#)
3. **Dry Needling vs. Acupuncture: The Ongoing Debate.** Kehua Zhou
  - [Zhou K, Ma Y, Brogan MS. Dry needling versus acupuncture: the ongoing debate. Acupunct Med J Br Med Acupunct Soc. November 2015. doi:10.1136/acupmed-2015-010911.](#)
4. **Acupuncture-related adverse events: a systematic review of the Chinese literature.** Zhang J
  - [Zhang J, Shang H, Gao X, Ernst E. Acupuncture-related adverse events: a systematic review of the Chinese literature. Bull World Health Organ. 2010 Dec 1;88\(12\):915-921C. doi: 10.2471/BLT.10.076737. Epub 2010 Aug 27](#)

## Suggested Reading:

1. Stecco, L. Fascial Manipulation for Musculoskeletal Pain. Picin: Padova, IT;. 2004.
2. Dung, H. Acupuncture: An Anatomical Approach. 2nd Edition. CRC Press: Boca Raton, FL; 2014.
3. Trail Guide to the Body 5th Edition
4. Palpation Techniques: Surface Anatomy for Physical Therapists

## Required Course Supplies:

1. **An Anatomy Reference – Preferred references below, however any anatomy reference will be acceptable.**
  - a. Visible Body app – Human Anatomy Atlas. \*NOTE: A free one-year subscription is included with your registration. Just before your course, we will send you a code and instructions on how to download and install the Visible Body app.
  - b. Trail Guide to the Body 5th Edition
  - c. Palpation Techniques: Surface Anatomy for Physical Therapists

2. **Portable TENS Unit**
    - a. [Analog 250 TENS unit](#)
    - b. [Alligator Clips](#)
  3. **If you have a latex allergy, it is recommended for you to bring your own gloves for use during lab.**
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## **Attendance & Cancellation Policy**

Structure & Function Education will make every effort to run each course that is advertised. Due to unforeseen circumstances, sometimes this is not possible. Therefore, we recommend waiting until four weeks prior to your course to book travel arrangements.

If a course is canceled or is interrupted while in progress by an 'act of God' (such as, but not limited to, fires, explosions, earthquakes, drought, tidal waves, floods, or viral pandemics) or circumstances beyond our control, no refunds will be issued. Structure & Function Education will gladly transfer your course registration, for no fee, to the same type of course at a mutually agreeable future date and location. Neither Structure & Function Education nor the host facility is responsible for any reimbursement of expenses incurred by participants, including airline tickets or hotel accommodations.

### **Cancellation by Structure & Function Education (outside of reasons listed above)**

1. Structure & Function Education reserves the right to cancel any course for any reason.
2. Registrants will be notified, via email, of such cancellation, no less than 30 days prior to the applicable course date.
3. If a course is cancelled by Structure & Function Education, the course participant will be entitled to a full refund or be allowed to transfer the funds to another scheduled course. Structure & Function Education is not financially responsible for any airfare, hotel, or any other personal travel expenses.

### **Cancellation by Course Participant**

1. If the registrant cancels 30 or more calendar days prior to the beginning of the course, registrant may apply the full course fee to another class, with no extra fees applied, or a refund minus 20% of registration fee for bank charges and administrative fees.
2. If less than 30 days to a registered course, the participant will not be eligible for a refund, but can transfer their funds one time to another scheduled course for no additional fees. If registrant needs to cancel a second time, a 20% (of course registration) administrative fee will be charged for every course cancellation and reregistration moving forward
3. If registrant does not use transferred funds within one year, they will not be refunded and will not be able to transfer their funds to another scheduled course.
4. Structure & Function Education is not financially responsible for any airfare, hotel, or any other personal travel expenses.

## **Attendance Policy**

1. Once you have purchased a registration, you are required to attend the entire course in order to receive the Certificate of Completion and any CEU credit. Exceptions to this rule will not be allowed under any circumstances.
2. No shows to a course are not refunded.



## STRUCTURE & FUNCTION EDUCATION

### Foundations in Dry Needling for Orthopedic Rehab and Sport Performance- 25 Hours

#### **Day 1:**

- 8:00- 8:15 Introductions/ Intro to SFDN
- 8:15- 10:35 Lecture: History of dry needling (DN), scientific evidence and basis of DN; Physiological considerations and current research; billing and professional considerations.
- 10:35-10:45 Break
- 10:45- 12:30 Lecture: Blood borne pathogens, universal precautions, and safety issues related to DN. Contraindications and precautions for DN. Basic needle insertion and removal.
- 12:30-1:30 Lunch
- 1:30- 3:00 Demo & Lab: Lateral Hip Pathologies
- Trochanteric Pain Syndrome
- 3:00-4:15 Demo & Lab: Posterior Hip Pathologies
- Piriformis Syndrome
  - Hip Labral Tear/ FAI
- 4:15-5:30 Demo & Lab: Anterior Hip and Thigh Pathologies
- Sports Hernia
  - Groin / Quad Strain
- 5:30-6:00 Lecture: Use of Electrical Stimulation
- Case Review of LE pathology with IMS and Estim tx strategies

#### **Day 2:**

- 8:00-9:30 Demo & Lab: Knee Pathologies
- Ligamentous Injuries (non –operative and post op)
  - Meniscal And Articular Cartilage Injuries
  - ITB Syndrome
  - Anterior Knee Pain/ Patella And Quad Tendonopathy/ Quad Strains
- 9:30- 11:00 Demo & Lab: Posterior Leg Pathologies
- Posterior Chain (excluding hip)
  - Hamstring/ Calf Strains
  - Plantar Fasciitis



## STRUCTURE & FUNCTION EDUCATION

- 11:00-12:00 Demo & Lab: Foot and Ankle Pathologies
- Lateral And Medial Ankle Sprains; Midfoot Sprains
  - Anterior Ankle Impingement
  - Bunions And Turf Toe
  - Neuroma's
- 12:00- 1:00 Lunch
- 1:00-2:30 Demo & Lab: Head and Cervical Pathologies
- Upper Trapezius Strains And Spasm
  - Whiplash
  - Cervicogenic Headaches
  - TMJ
- 2:30-4:00 Demo & Lab:  
TMJ/ Face
- 4:00-6:00 Demo and Lab: Elbow / Wrist/ Hand Pathologies
- Lateral And Medial Epicondylitis
  - UCL Tears (Non-Operative And Post Op)
  - Flexion And Extension Contractures
  - Tricep/ Extensor Mechanism Pathologies
  - Carpal Tunnel Syndrome
  - Dorsal Impingement
  - TFCC
  - IP Arthritis/ Finger Dislocations
- Day 3:**
- 8:00-9:30 Demo & Lab: Low Back Pathologies
- DJD/ DDD
  - Spondylolisthesis
  - NSLBP
- 9:30-11:00 Demo & Lab: Posterior Shoulder Pathologies
- Rotator Cuff Strains (Posterior Approach)
  - Lat/ Teres Major Strains (Posterior Approach)
  - Labral Tears (Posterior Approach)
- 11:00- 12:30 Demo & Lab: Anterior Shoulder Pathologies and Lift Techniques
- Pec Strains
  - Rotator Cuff Strains (Anterior Approach)
  - Lat/ Teres Major Strains (Anterior Approach)
  - Labral Tears (Anterior Approach)



**STRUCTURE & FUNCTION**  
EDUCATION

12:30-1:30	Lunch
1:30-4:00	SFE Case Study Discussion and Treatment Strategies Course Self-Reflection/Course Wrap-up Testing: Written Testing: Practical

*\*Breaks are taken individually, as needed, during lab portion of class*