

## **FMT Advanced**

### **CEU CREDITS: 6 hours**

CEUs may be offered for DC, ATC, PT, LMTs, LAc's, and personal trainers – depending on location and class type.

Prerequisite: FMT Basic Kinesiology Taping

### **COURSE SUPPLIES & RECOMMENDATIONS FOR PARTICIPANTS:**

This course will supply the tape, scissors and performance equipment needed. In addition, a digital course manual will be provided. Participants should wear comfortable clothing to allow for full range of motion and application of tape. Participants are responsible for food, drinks and writing materials.

### **COURSE DESCRIPTION:**

This course expands on the concepts taught in FMT Basic Kinesiology Taping and explores strategies to enhance human movement and performance through evidence-based functional taping methods. The anatomy and physiology of myofascial lines will be covered, the fascial lines are used in conjunction with kinesiology taping techniques to support efficient human movement. Sport-specific taping techniques are introduced, and students will have opportunities to assess dysfunction in specific anatomical planes of motion. Tape application techniques are explored and practiced with an emphasis on taping fascial chains to improve movement and enhance function. Students will learn techniques in a hands-on laboratory environment where they will have ample practice and instructor feedback on their techniques.

This course is intended for health professionals with all levels of prior taping experience. All supplies needed for the course and lab experiences are provided.

Functional Movement Training (FMT) Certification courses are led by industry leading experts in movement assessment, performance and rehabilitation.

### **Education Objectives of FMT Advanced Kinesiology Taping: At the conclusion of the course, attendees will be able to:**

1. Discuss, practice and integrate the concept of longitudinal muscle chain kinesiology taping.

2. Discuss, demonstrate and interpret movement screening techniques to evaluate functional and dysfunctional movement patterns.
3. Demonstrate and discuss the concepts of longitudinal fascial chain kinesiology taping
4. Demonstrate and evaluate effective functional taping applications based on findings in movement assessment.
5. Compare and contrast sport-specific movement patterns and how kinesiology tape improves sports performance.
6. Compare and contrast upper and lower extremity helical fascial chain taping applications.
7. Introduce, interpret and practice applications for compression band floss in the upper and lower extremity as well as the trunk.
8. Critically analyze movement screening and correlated tape application for specific sports

## **FMT ADVANCED KINESIOLOGY TAPING - COURSE OUTLINE**

**8AM – 3PM**

### **Hour One (8am-9am)**

Welcome & introduction of instructor and course participants

Review of Basic taping framework for acute and sub-acute musculoskeletal conditions

Overview of outline of the course; introduction of topics that will be covered as well as description of practical lab experience and presentation of case studies.

### **Movement Science (Ch 1)**

Movement Science Concepts

### **Perception Science (Ch 2)**

Perception Science and its influence on movement quality and quantity

### **Research Update (Ch 3)**

Global Effects of Taping

Tape and compromised populations

Tape and performance population

Tape and influence on movement screening scores/movement quality

### **Human GPS System (Ch 4)**

How fascia influences movement

How skin influences fascia

How musculoskeletal ultrasound can be integrated as a teaching tool for deeper understanding of skin and fascial relationships

### **Joint by Joint Concept (Ch 5)**

Kinetic chain approach (Ch 5) Joint by Joint and Mobility/Stability Concepts

Priming the nervous system

Pain gate stimulation

### **Hour Two (9am-10am)**

#### **Planes of Movement Review (Ch 6)**

Fascial Chain Anatomy & Function

Tape application theory and practice

Tissue preparation, pre-application and application techniques for the following fascial chains

#### **Fascial Chains - Performance Back Chain (Ch 7)**

Present anatomical sub-components, physiology/function of Performance Back Chain

Performance back chain taping

Function of the chain: slow twitch, postural support, extension, resists flexion

Pre-application, positioning of the patient/client

Application of tape along chain, assessment of efficacy of tape application.

Motor Control Exercises/Neuromuscular Retraining for the Performance Back Chain

#### **Fascial Chains - Performance Lateral Chain (Ch 8)**

Present anatomical sub-components, physiology/function of Performance Lateral Chains

Performance lateral chain taping

Function of the chain: Frontal pain support, trunk stability

Pre-application, positioning of the patient/client

Application of tape along chain, assessment of efficacy of tape application.

Motor Control Exercises/Neuromuscular Retraining for the Performance Lateral Chains

#### **Fascial Chains - Performance Functional Chain (Ch 9)**

Present anatomical sub-components, physiology/function of Performance Functional

Chains

**Fascial Chains - Performance Core Chain (Ch 10)**

Present anatomical sub-components, physiology/function of Performance Core Chain

**10 minute break (10am-10:10am)**

**Hour Three (10:10am-11am)**

**Fascial Chains - Performance Arm Chain (Ch 11)**

Present anatomical sub-components, physiology/function of Performance Extremity Chains

**Fascial Chains - Performance Spiral Chain (Ch 12)**

Present anatomical sub-components, physiology/function of Performance Spiral Chains

**Compression Band Flossing (Ch 13)**

Introduction of compression band flossing equipment, discussion on physiological effects and introduction of applications for trunk, upper and lower extremities  
Practice/Evaluation of flossing techniques Upper Body/Lower Body/ Spine

**Hour Four (11am-12pm)**

**Tweak Taping (Ch 14)**

Introduction to Tweak Taping Concepts and applications  
Practice/Evaluation of technique Upper Body/Lower Body/ Spine Tweak Taping  
Concepts and applications

**Screen/Intervene/Rescreen (Ch 15)**

Movement assessment content overview

- Importance of assessment

- Historical Assessments

- New paradigm in assessments

**Data Collection and Objective Data Screening (Ch 16)**

**60 minute LUNCH break (12pm-1pm)**

## **Hour Five (1pm-2pm)**

### **Breathing Screen (Ch 17)**

Breathing Pattern Assessment and Screen

Systematic assessment of breathing patterns, present normal pattern, identify and observe abnormal patterns

Common movement dysfunctions of breathing patterns

Kinesiology tape as a corrective intervention for this dysfunctional pattern

### **Scapular Screen (Ch 18)**

Systematic assessment of the scapular pattern, Present normal pattern, identify dysfunctional patterns

Common movement dysfunctions of the scapular pattern

Kinesiology tape as a corrective intervention for this dysfunctional pattern

### **Single Leg Squat Screen (Ch 19)**

Systematic assessment of the single leg squat pattern, Present normal pattern, identify dysfunctional patterns

Common movement dysfunctions of the single leg squat pattern

Kinesiology tape as a corrective intervention for this dysfunctional pattern

## **Hour Six (2pm-3pm)**

### **Sport-specific taping introductions and lab practice (Ch 20)**

Specific chains for yoga, running, throwing, kicking and scenarios related to sport movement.

Application of tape along chain for one sport-specific pattern

Motor Control Exercises/Neuromuscular Retraining for Sport Specific Taping

### **Sport-specific taping introductions and lab practice - Running(Ch 21)**

### **Sport-specific taping introductions and lab practice - Throwing (Ch 22)**

### **Sport-specific taping introductions and lab practice - Yoga (Ch 23)**

## FMT Advanced Taping APA References

1. Ryu, C. H., Park, J., Kang, M., Oh, J. H., Kim, Y. K., Kim, Y. I., ... & Seo, S. G. (2019). Differences in lower quarter Y-balance test with player position and ankle injuries in professional baseball players. *Journal of Orthopaedic Surgery, 27*(1), 2309499019832421.
2. Yam, T. T., Or, P. P., Ma, A. W., Fong, S. S., & Wong, M. S. (2019). Effect of Kinesio taping on Y-balance test performance and the associated leg muscle activation patterns in children with developmental coordination disorder: A randomized controlled trial. *Gait & posture, 68*, 388-396.
3. Saltan, A., Baltaci, G., & Ankarali, H. (2018). Does" Kinesio" taping improve on balance and functional performance in older adults: a pilot study. *The Journal of sports medicine and physical fitness*.
4. Wang, Y., Gu, Y., Chen, J., Luo, W., He, W., Han, Z., & Tian, J. (2018). Kinesio taping is superior to other taping methods in ankle functional performance improvement: a systematic review and meta-analysis. *Clinical rehabilitation, 32*(11), 1472-1481.
5. Lu, Z., Li, X., Chen, R., & Guo, C. (2018). Kinesio taping improves pain and function in patients with knee osteoarthritis: A meta-analysis of randomized controlled trials. *International Journal of Surgery*.
6. Alghamdi, A., & Shawki, M. (2018). The effect of kinesio taping on balance control and functional performance in athletes with chronic ankle instability. *MOJ Orthop Rheumatol, 10*(2), 114-120.
7. Cline, J., Thomas Fenwick, A., Turner, T., Arthur, S., & Wikstrom, E. A. (2018). Nonelastic and Kinesio Tex Tapes Improve Perceived Stability But Not Postural Control in Participants With Chronic Ankle Instability. *International Journal of Athletic Therapy and Training, 23*(5), 195-199.

8. Unger, M., Carstens, J. P., Fernandes, N., Pretorius, R., Pronk, S., Robinson, A. C., & Scheepers, K. (2018). The efficacy of kinesiology taping for improving gross motor function in children with cerebral palsy: A systematic review. *The South African journal of physiotherapy*, 74(1).
9. Cline, J. H. (2016). *The effect of Kinesio Tex tape in participants with chronic ankle instability after a fatigue protocol* (Doctoral dissertation, The University of North Carolina at Charlotte).
10. Gusella, A., Bettuolo, M., Contiero, F., & Volpe, G. (2014). Kinesiologic taping and muscular activity: a myofascial hypothesis and a randomised, blinded trial on healthy individuals. *Journal of Bodywork and Movement Therapies*, 18(3), 405-411.
11. Serra, M. V., Vieira, E. R., Brunt, D., Goethel, M. F., Gonçalves, M., & Quemelo, P. R. (2015). Kinesio Taping effects on knee extension force among soccer players. *Brazilian journal of physical therapy*, 19(2), 152-158.
12. Pamuk, U., & Yucesoy, C. A. (2015). MRI analyses show that kinesio taping affects much more than just the targeted superficial tissues and causes heterogeneous deformations within the whole limb. *Journal of biomechanics*, 48(16), 4262-4270.
- 13.
14. Schiffer, T., Möllinger, A., Sperlich, B., & Memmert, D. (2015). Kinesio taping and jump performance in elite female track and field athletes. *Journal of sport rehabilitation*, 24(1), 47-50.
15. Takasaki, H., Delbridge, B. M., & Johnston, V. (2015). Taping across the upper trapezius muscle reduces activity during a standardized typing task—An assessor-blinded randomized cross-over study. *Journal of Electromyography and Kinesiology*, 25(1), 115-120.
16. Fayson, S. D., Needle, A. R., & Kaminski, T. W. (2015). The effect of ankle Kinesio tape on ankle muscle activity during a drop landing. *Journal of sport rehabilitation*, 24(4), 391-397.
17. Butler, R. J., Bullock, G., Arnold, T., Plisky, P., & Queen, R. (2016). Competition-level differences on the lower quarter Y-balance test in baseball players. *Journal of athletic training*, 51(12), 997-1002.
18. Hudson, C., Garrison, J. C., & Pollard, K. (2016). Y-balance normative data for female collegiate volleyball players. *Physical Therapy in Sport*, 22, 61-65.
19. Lumbroso, D., Ziv, E., Vered, E., & Kalichman, L. (2014). The effect of kinesio tape application on hamstring and gastrocnemius muscles in healthy young adults. *Journal of bodywork and movement therapies*, 18(1), 130-138.
20. Gusella, A., Bettuolo, M., Contiero, F., & Volpe, G. (2014). Kinesiologic taping and muscular activity: a myofascial hypothesis and a randomised, blinded trial on healthy individuals. *Journal of Bodywork and Movement Therapies*, 18(3), 405-411.
22. Gomez-Soriano, J., Abián-Vicén, J., Aparicio-García, C., Ruiz-Lázaro, P., Simón-Martínez, C., Bravo-Esteban, E., & Fernández-Rodríguez, J. M. (2014). The effects of Kinesio taping on

muscle tone in healthy subjects: a double-blind, placebo-controlled crossover trial. *Manual therapy*, 19(2), 131-136.

23. Tamburella, F., Scivoletto, G., & Molinari, M. (2014). Somatosensory inputs by application of KinesioTaping: effects on spasticity, balance, and gait in chronic spinal cord injury. *Frontiers in human neuroscience*, 8, 367.

24. An, H. M., Miller, C. G., McElveen, M., & Lynch, J. M. (2012). The effect of kinesio tape® on lower extremity functional movement screen™ scores. *International Journal of Exercise Science*, 5(3), 2.

25. Thedon, T., Mandrick, K., Foissac, M., Mottet, D., & Perrey, S. (2011). Degraded postural performance after muscle fatigue can be compensated by skin stimulation. *Gait & posture*, 33(4), 686-689. Choi IR, Lee JH. Effect of kinesiology tape application direction on quadriceps strength. *Medicine (Baltimore)*. 2018 Jun;97(24):e11038.

26. Slevin ZM, Arnold GP, Wang W, Abboud RJ. Immediate effect of kinesiology tape on ankle stability. *BMJ Open Sport Exerc Med*. 2020 Feb 4;6(1):e000604.

27. Park JS, Yoon T, Lee SH, Hwang NK, Lee JH, Jung YJ, Lee G. Immediate effects of kinesiology tape on the pain and gait function in older adults with knee osteoarthritis. *Medicine (Baltimore)*. 2019 Nov;98(45):e17880

28. Yang L, Yang J, He C. The Effect of Kinesiology Taping on the Hemiplegic Shoulder Pain: A Randomized Controlled Trial. *J Healthc Eng*. 2018 Dec 10;2018:8346432

29. Reneker JC, Latham L, McGlawn R, Reneker MR. Effectiveness of kinesiology tape on sports performance abilities in athletes: A systematic review. *Phys Ther Sport*. 2018 May;31:83-98.

#### **TEACHING METHODS USED:**

1. Power Point Presentation
2. Demonstration
3. Small Group/Partner Practice Sessions