**Advanced Lower Quarter MSI Syndromes Course**

**9/30 ~ 10/1/2023 (optional 10/2/2023) Hybrid Program (O = onsite, V = virtual)**

**Course Description**

The 2-day hybrid advanced course consists of lectures and lab about movement system impairment (MSI) syndromes of the hip. Tibiofemoral Rotation Syndrome and Movement Spectrum will also be discussed in the lectures. Pre-requisite for this course is the MSI syndromes of the Lumbar Spine course. Participants will focus their learning on femoral and hip MSI syndromes, hip-specific tests, and associated interactions with lumbar spine / knee.  Onsite participants will have guided hands-on lab sessions, while virtual participants will have guided postural / movement analysis lab in small groups to practice skills in examination and diagnosis. Lab sessions will be focused on lumbar spine and hip.

Detailed findings from the systematic exam will be tied into functional tasks using the concept of Movement Spectrum (progressive programming).

For onsite participants, there is an option for staying one extra day (October 2, 2023) for a practical exam day.  This is a wonderful chance for you to formally get assessed on your examination skill, identification of movement system diagnosis, ability to state the contributing factors, and demonstrate the treatment ideas.

**Course Objectives**

# At conclusion of this course, the participants should be able to

1. Describe the kinesiopathologic model
2. Understand performance and interpretation of tests of a systematic examination of the hip and lumbar spine, as well as selective tests of the knee joint.
3. Describe the MSI syndromes of the lumbar, hip regions and the tibiofemoral rotation syndrome.
4. Identify the contributing factors to the above MSI syndromes.
5. Use the results of the systematic examination to develop a diagnosis and treatment program that includes appropriate exercises and correction of task performance.
6. Apply concepts of the movement spectrum when progressing an intervention program

Upon completion of the third day practical exam, the participant will:

1. Demonstrate competency in performing a systematic examination of an individual with low back/hip pain.
2. Be able to state the working diagnosis after taking the subjective history and assessing alignment.
3. Demonstrate correct performance of movement tests comprising the systematic examination for the lumbar spine/hip.
4. Identify and describe the movement impairments and their contributing factors.
5. Make an accurate diagnosis of a subject with lumbar or hip pain and describe the contributing factors.
6. Educate the individual with lumbar or hip pain on 3-5 appropriate exercises and modifications of ADL’s / pain producing tasks using the motor learning principle.

**Course Schedule (indicated in CENTRAL time or St. Louis time)**

Day 1 (Saturday 9/30/2023)

9 – 9:15 am Introduction O & V

9:15 – 10:15 Hip Lecture: Structure and Muscular Factors (lecture from June will be uploaded to this course page – please study that before 9/30) O & V

10:15– 10:30 Break

10:30-12:00 Lab:

Onsite: Demonstration and practice selected tests of hip

Stand alignment, rotation, cluster for anteversion (log roll, rotation at 90, prone rotation and craig test, SLR and hip flexion/knee flexed)

Virtual: Demonstration of hip specific tests (instructor live demonstration of selected hip specific tests on a subject). No breakout rooms.

12:00 – 1:00 Lunch

1:00 – 2:30 Femoral MSI Syndromes – impairments in accessory motion O & V

2:30 – 2:45 Break

2:45 – 3:45 Hip pain subject demonstration O & V

3:45 – 5:00 Lab: Onsite: working in 3s to perform LQ tests

Virtual: Instructor performing live demonstration of tests from start to finish, then going into breakout rooms 3 separate times. \*standing / supine (20 min / 8 min) \*sidelying / prone (15 min / 8 min) \*quadruped / sitting (15 min / 8 min)

Day 2 (Sunday 10/1/2023)

9:00 – 10:00 Q and A and Hip MSI Syndromes lecture – impairments in physiological motion O & V

10:00 – 10:45 Tibiofemoral rotation syndrome lecture O & V

10:45 – 11:00 Break

11:00 – 12:30 Examination of subject with hip / back pain, develop and instruct in treatment

Program / functional activities

O – lab (2:1 or 3:1 sessions and 2 small groups).

V – PowerPoint with hip case (breakout rooms)

12:30-1:30 Lunch

1:30 – 2:30 Movement Spectrum lecture, developing treatment program for athletes

2:30 – 2:45 Break

2:45 – 4:15 Examination of subject with hip / back pain, develop and instruct in treatment

program / functional activities

O – lab (2:1 or 3:1 sessions and 2 small groups).

V – Demonstrate hip / back subject by Shirley with 3 rounds of 8 min breakouts.

4:15 – 4:30 Break

4:30 – 5:00 Q&A and closing comments

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Day 3 (Monday 10/2/2023) \*optional practical exam

9:00 – 9:15 Introduction and instructions

9:15 – 10:45 Personalized guided practice of examination and clinical reasoning

10:45 – 11:00 Break

11:00 – 12:45 Half of participants will be assessed on their performance of an exam, ability to make a diagnosis, and prescription of a treatment program for a person with hip or low back pain. (1 participant; 1 faculty; 1 patient) (1 hour exam, 15 minutes feedback on exam and diagnosis, 15 minutes treatment prescription, and 15 minutes feedback on treatment and overall performance)

\*The other half: Motor skill training (implement motor learning principle while instructing activities, based on movement system diagnosis) 1 person instructing, 1 person as patient, 1 person grading with rubric

After the motor skill training lab, the group will practice progression of exercises in the Movement Spectrum.

12:45 – 1:45 Lunch

1:45 – 3:30 Half of participants will be assessed on their performance of an exam, ability to make a diagnosis, and prescription of a treatment program for a person with hip or low back pain. (1 participant; 1 faculty; 1 patient) (1 hour exam, 15 minutes feedback on exam and diagnosis, 15 minutes treatment prescription, and 15 minutes feedback on treatment and overall performance)

\*The other half: Motor skill training (implement motor learning principle while instructing activities, based on movement system diagnosis) 1 person instructing, 1 person as patient, 1 person grading with rubric

After the motor still training lab, the group will practice progression of exercises in the Movement Spectrum.

3:30-4:00 Group discussion (get feedback from group about confidence to implement this in practice, strengths, weaknesses, suggestions for future)