

- ❖ Analyze and integrate the data from manual physical therapy assessment and intervention techniques to influence the mechanisms and function of dysfunctional lower quadrant joints
- ❖ Evaluate intervention effectiveness and current literature and evidence to progress or modify intervention safely, efficiently and effectively to meet the patient/client needs

SPECIFIC COURSE OBJECTIVES:

At the completion of this course, the participants will be able to:

1. Apply advanced normal and pathological biomechanics principles to the assessment and intervention of lower quadrant dysfunctions of the joints of the lower thoracic spine, ribs, lumbar spine, sacro-iliac and extremity joints of the lower limb
2. Assess the postulated local and remote effects of abnormal posture on the tissues and biomechanics of the thoraco-lumbar spine, pelvic girdle complex and lower extremity joints
3. Apply concepts of the functional unit to the assessment and intervention of lower quadrant syndromes
4. Evaluate the mechanisms of interdependent normal and pathological biomechanics between the lower thoracic, lumbar, pelvic girdle and all lower extremity joints
5. Apply principles of axoplasmic flow compromise, segmental facilitation and double crush syndrome to the assessment and intervention of the thoraco-lumbar-pelvic and lower extremity units
6. Identify the indications and contraindications for OMPT intervention to the sacro-iliac joint, lumbar and lower thoracic spine, lower ribs and lower extremities
7. Assess the signs and symptom clusters for common sacro-iliac joint pathologies
8. Perform an efficient and detailed selective tissue tension and biomechanical examination of the sacro-iliac joints and perform appropriate biomechanical and non- biomechanical intervention techniques for sacro-iliac joint dysfunction
9. Assess the mechanisms of interdependent normal and pathological biomechanics between the sacro-iliac joint, the lumbar spine and hip
10. Analyze the effect on walking gait of functional short and long legs
11. Perform an efficient screening and detailed biomechanical examination of the lumbar, sacro-iliac, lower thoracic and ribs and perform specific gliding and traction mobilization/manipulation (including high velocity low amplitude/thrust) techniques utilizing combined motions and locking/focusing
12. Identify the indications and contraindications for mobilization/manipulation including high velocity low amplitude manual techniques to lower limb joints and selected lumbo-sacral joints.
13. Utilize special tests and screening to minimize the potential risks of manual physical therapy assessment and intervention to the patient/client
14. Plan and perform combined movement end range examination and intervention techniques (quadrant tests and interventions) where appropriate for the lower limb joints;
15. Analyze the clusters of symptoms and signs to formulate hypotheses of relationships within the lower quadrant, and the effect of dysfunction (culprits) on the etiology of common lower quadrant syndromes (victims). e.g. heel pain, shin splints, anterior knee pain, lateral hip pain etc.
16. Perform high velocity low amplitude manual techniques (thrust) safely and effectively to lower extremity joints
17. Integrate joint mobilization/manipulation with other manual and non-manual interventions
18. Effectively manage the patient/client who has multiple remote and symptomatic dysfunctions
19. Discuss the strengths and weakness of manual physical therapy assessment and interventions as demonstrated by the current literature and evidence

The descriptions of the minimum course components may vary according to the instructor's assessment of the needs or expertise of the class. Some areas may be covered in guided independent study.

**NAIOMT 710 - LEVEL III LOWER QUADRANT:
ADVANCED MOBILIZATION/MANIPULATION**

HIGHLIGHTS

- **Why is the dysfunction present and what is contributing?**
- **Quadrant inter-unit and intra-unit theories, with application to load transfer and gait**
- **Biomechanical lumbo-pelvic stability and mobility testing; mobilization and stabilization techniques**
- **Lumbar combined and locking/focusing techniques**
- **Syndromes including: heel pain, shin splints, knee pain, lumbo-pelvic-hip dysfunctions, functional short/long leg**
- **Indications & contraindications to mobilization/manipulation (including thrust)**
- **Advanced lower extremity joint and lumbo-pelvic spinal techniques, including thrust***

** In States that have restrictions on PT use of manipulation/thrust, the syllabus may be modified*

CLOCK HOURS: 42 contact hours, typically 50% lab in 6-day course or 2, 3-day courses

COURSE DESCRIPTION:

This course will teach advanced biomechanical examination techniques and intermediate/advanced manual physical therapy mobilization/manipulation techniques to the lower quadrant, primarily focusing on the components within the symptomatic joint's functional unit. Methods of integration and analysis of data from the examinations will be explored, with emphasis on pathological screening, biomechanical diagnosis, and the assessment of normal and pathological relationships between joints adjacent & remote from a primary dysfunction, "victim" and "culprit" concepts.

The course is designed to build on the knowledge from previous NAIOMT lower quadrant courses, but with greater emphasis on the intra-unit relationships of the lower quadrant, including detailed study of gait and load transfer, the sacro-iliac joints and utilization of high velocity techniques to the extremity joints and lumbo-pelvic region. This class is intended for the physical therapist with substantial experience in manual physical therapy

AUDIENCE:

Physical Therapists

PRE-REQUISITES:

- ❖ Licensed Physical Therapist (*copy of current PT license required*)
- ❖ It is highly recommended that the course participant has completed NAIOMT courses 500 (level I: Differential Diagnosis), 610 and 625 (level II lower quadrant mobilization and extremity manipulation) or equivalents.
- ❖ NAIOMT level II examination/test certificate is recommended but not required

COURSE GENERAL OBJECTIVES:

The course will facilitate the participant to more efficiently and effectively:

- ❖ Analyze normal biomechanics and abnormal pathomechanics of the lower quadrant joints: lower lumbar, lumbar, thoracic and ribs, sacro-iliac, pelvic girdle, knee, ankle and foot; specifically to recognize hypomobility, hypermobility and instability in individual and groups of joints (intra-unit) and their potential to influence local and remote function (inter-unit) including gait
- ❖ Analyze the indications and contraindications and perform high velocity low amplitude techniques (thrust) to the lower limb extremity and lumbo-sacral joints
- ❖ Apply lower quadrant advanced biomechanical examination and evaluation, joint mobilization/manipulation and stabilization interventions to lumbar and thoracic, extremity joint manipulation