

NAIOMT 720
CLINICAL REASONING IN ADVANCED DIFFERENTIAL DIAGNOSIS

HIGHLIGHTS

- **Case studies used to illustrate and explore principles of advanced differential diagnosis**
- **Formation of a diagnosis by analysis of clusters of signs and symptoms**
- **Discussion of anatomical, scientific and research evidence to support the musculoskeletal diagnosis**

CLOCK HOURS: 21 contact hours, typically a 3-day course

COURSE DESCRIPTION:

This course will teach the integration of the data collected from the subjective examination (history and systems review) and the selective tissue tension examination (tests and measures from the scanning examination) to obtain a rational differential diagnosis. It will develop and apply principles acquired from the NAIOMT 500 (Level 1) course, however review and practice of examination or treatment techniques will be only a small part of this course.

Teaching will be from a clinical experiential perspective utilizing case presentations and will emphasize the importance of anatomical and research evidence and the analysis of clusters in forming advanced differential diagnoses. The course includes a handout and pre- and/or post- course assignments may be offered.

AUDIENCE:

Physical Therapists

PRE-REQUISITES:

- Licensed Physical Therapist in good standing (*copy of current PT license required*)
- NAIOMT 500 or equivalent medical screening and differential diagnosis course not required but highly recommended. NAIOMT 600, 610, 625, 700 and 710 core courses highly recommended but not required.
- NAIOMT level II certificate is recommended but not required

COURSE GENERAL OBJECTIVES:

The course will enhance the ability of the physical therapist to efficiently and accurately formulate musculoskeletal diagnoses, utilizing familiar clinical data collection methods. The physical therapist will be able to apply their advanced knowledge of anatomy, pathomechanics, medicine and literature evidence to the recognition of clusters of signs and symptoms in the clinical setting.

SPECIFIC COURSE OBJECTIVES:

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

1. Apply an advanced knowledge of the anatomy and pathomechanics of the spine and peripheral joints to the performance of the examination of the patient/client
2. Apply relevant research and evidence of advanced differential diagnosis to the performance of the examination of the patient
3. Perform an accurate, focused and detailed history taking in the development of the advanced differential diagnosis process
4. Appraise the relative importance of the history data
5. Analyze the principles of the selective tissue tension examination of Cyriax

6. Correctly apply the selective tissue tension tests to every area of the spine and all peripheral joints
7. Integrate and evaluate the examination data to develop a musculoskeletal differential diagnosis or to make a provisional diagnosis of mechanical pain requiring further clinical investigation
8. Evaluate examination data to determine the need for further medical tests and physician referral
9. Integrate and evaluate the examination data to make a prognosis predicting the response and outcome to manual physical therapy and/or the need for further testing or referral
10. Formulate a safe, effective and efficient manual physical therapy treatment (intervention) plan
11. Document and communicate the outcomes

The descriptions of the minimum course components, but this 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.

TOPICAL OUTLINE – SUMMARY NAIOMT 720

- 1) Brief review of principles of differential diagnosis (from NAIOMT500/level I)
- 2) To capture the principles of differentiating, representative cases will be presented with their clinical picture and selected from the following spinal conditions
 - a) mechanical spinal pain
 - b) whiplash
 - c) systemic arthritis
 - d) disc dysfunction
 - i) lumbar disc degeneration versus degradation
 - ii) cervical disc degeneration
 - iii) disc herniation (contained & uncontained)
 - e) neoplastic disease
 - f) headache
 - g) trunk, arm, leg pain
 - h) dizziness
 - i) sacro-iliac arthritis/arthrosis
 - j) fracture
 - k) thoracic outlet syndrome
 - l) spondylolisthesis/retrolisthesis
 - m) stenosis
 - n) intermittent claudication
 - o) viscerogenic low back pain
- 3) To capture the principles of differentiating, representative cases will be presented with their clinical picture and selected from the following peripheral (extremity) conditions:
 - a) peripheral neuropathy
 - b) fracture
 - c) arthritis/arthrosis
 - d) muscle/tendon dysfunction
 - e) instability dysfunctions
 - f) impingement syndromes
 - g) hypomobility and hypermobility dysfunctions
 - h) double crush syndromes
 - i) autonomic and circulatory disturbances