



Curriculum of the Orthopaedic Division of the Canadian Physiotherapy Association
Diploma of Advanced Orthopaedic Manual and Manipulative Physiotherapy
Level 1 Peripheral Vertebral Course

Course hours: 57 hours (54 instructional, 3 exam), completed over 8 days

Purpose: To teach clinical reasoning and patient handling skills, performing basic subjective and objective musculoskeletal assessments to generate a provisional differential diagnosis and treatment plan for musculoskeletal patients.

Objectives: At the completion of this course, the student will demonstrate competency in:

- Using clinical reasoning in completing a subjective examination and identifying nature, severity and irritability of a problem, as well as in completing an objective neuromusculoskeletal examination
- Identifying neuromuscular issues for further evaluation, considering testing and neuroanatomy relating to somatic and neuritic pain
- Performing a thorough peripheral joint examination including observation and active and passive tests for articular and muscular structures, utilizing the principles of selective tissue tension testing
- Integration of clinical reasoning into differential diagnosis of compromise/compression of neural tissue and vertebrobasilar insufficiency and disorders
- Integration of clinical reasoning into an understanding of evidence based practice in such areas as outcome measures, prognostic indicators, prevention and interdisciplinary communication
- Analyzing data including relevant pathology to establish clinical impressions and understand wound/injury repair, the role of physiotherapy and recognize non-mechanical disorders
- Considering indications and contraindications, safe application of soft tissue and neurological assessment and treatment techniques such as stress testing, neurological and arterial testing, traction and deep transverse frictions
- Understanding and application of basic spinal stabilization and prophylactic care

Syllabus/Topics Covered:

- Clinical reasoning, integration of the ICF model, and use of outcome measures
- Anatomy and Physiology including musculoskeletal embryology and function of varying tissue types; visceral system; peripheral and central nervous systems and indications of compromise; posture, compensation and functional units of the body; and tissue mechanics
- Introduction to motion states, neutral zone theory, injury and wound healing principles, and osteokinematics/arthrokinematics
- Neurophysiology: pain theory, pain mechanisms and segmental facilitation
- Detailed, systematic subjective assessment and physical examination with an emphasis on palpation, surface anatomy and handling throughout the body; active/passive movement, stability, stress and special tests for each joint and region including neurological and neuromeningeal testing
- Clinical relevance of medical testing and treatment to physiotherapy assessment/treatment
- Common and important conditions of the spine and extremities and their relevance to physiotherapy
- Techniques of treatment, indications and contraindications: deep transverse frictions, traction, spinal care, ergonomics and exercise, orthoses
- Physiotherapy issues including record keeping, legal and ethical concepts, informed consent and working with other disciplines in musculoskeletal care
- History of manual therapy and an introduction to scientific inquiry