Myofascial Pain and Modern Therapeutic Approaches: From Neurophysiology to Practice

Course Syllabus

Format: 4 modules, 12 days, 106 academic hours

Instructor: Constantine Berman

For: massage therapists, bodyworkers, physiotherapists, osteopaths, rehabilitation specialists, movement instructors

Course Overview

This course offers a comprehensive, science-based approach to understanding and treating myofascial pain syndromes. Moving away from outdated concepts that treat pain as a simple biomechanical damage, the course emphasizes pain as a complex neuroplastic process involving not only local muscle and fascia changes but also central nervous system adaptations.

Special attention is given to rethinking trigger points — not as "knots" or muscle "spasms", but as local zones of sensory-motor conflict, associated with altered sensory processing, local and central sensitization, and neuroperceptive pain regulation mechanisms.

Course Goals

By the end of the course, participants will be able to:

– Understand modern pain neurophysiology
– Differentiate tissue-based, neurogenic, and psychosomatic pain sources
– Apply the INIT protocol (Integrated Neuromuscular Inhibiting Technique)
– Use safe and gentle techniques to reduce nervous system sensitivity and restore functional movement
– Formulate an integrative clinical strategy for chronic and complex myofascial pain

Course Modules:

Introductory Module: Contemporary Pain Neuroscience

Duration: 3 days | **Hours:** 16 academic hours
Format: Theoretical + Clinical Foundations

Day 1 – What is Pain? A Contemporary Perspective

Theory (4 hrs):
• Introduction to pain neuroscience
• Pain classification: nociceptive, neuropathic, nociplastic
• Gate control theory
• Central sensitization and body maps
Practice (2 hrs):
• Tissue hypersensitivity testing
• Palpatory differentiation: pain vs. tension
• Demonstration: regulating neuroperceptive threat through contact

Day 2 – How the Brain and Body Construct Pain

Theory (4 hrs):
• From biomechanics to neuromatrix (Melzack, Moseley, Butler)
• Memory, expectations, and context as pain modulators
• Pain ≠ tissue damage
• DIM/SIM model (Danger in Me / Safety in Me)
• Psychosocial triggers of myofascial pain
• Paradoxes of chronic pain
• 30 unexpected causes of pain
Practice (2 hrs):
• Verbal modulation of SIMs and therapeutic contact
• Painless desensitization of localized areas

Day 3 – Manual Strategies and Rehabilitation

Theory (4 hrs):
• Rebuilding the body map: step-by-step
• Strategies for chronic pain rehabilitation

Outcomes:
– Knowledge of modern pain physiology

– Stepwise strategy for managing chronic pain
– Approaches tailored to sensitive and chronic pain clients

Module 1: Head and Neck Pain

Duration: 3 days | **Hours:** 30 academic hours

• Anatomy and biomechanics of cervical and cranial muscles
• Common trigger zones and pain referral patterns
• Differential diagnosis: visceral, neurological, somatic
• Clinical interview for tension-type and cervicogenic headaches
• Trigger point evaluation techniques
• INIT Protocol:
– Active and passive release
– Compression
– Strain-counterstrain
– Post-isometric relaxation
– Functional neck massage
• Step-by-step treatment protocol
• Clinical cases and supervised practice

Module 2: Upper Back, Shoulder Girdle, Arm

Duration: 3 days | **Hours:** 30 academic hours

• Anatomy and biomechanics of the shoulder and upper limb
• Common trigger points and referred pain maps
• Differential diagnosis of back and arm pain
• Clinical interview and assessment
• INIT treatment techniques
• Full therapeutic protocol
• Clinical cases and supervised practice
• Principles of sensorimotor re-education
• Integration and control exercises

Module 3: Low Back, Pelvis, Lower Limb

Duration: 3 days | **Hours:** 30 academic hours

- Myofascial sources of low back pain
- Radiculopathy or MFPS? Differential diagnosis
- INIT protocol and fascial decompression strategies
- Stepwise therapeutic approach
- Movement over rest: reintegration strategies
- Clinical case work and supervision
- Patient-centered individualization of therapy

Course Structure Summary

Module	Focus Area	Days	Hours
Introductory	Contemporary Pain Neuroscience	3	16
Module 1	Head and Neck Pain	3	30
Module 2	Upper Back, Shoulder, Arm	3	30
Module 3	Low Back, Pelvis, Lower Limb	3	30
Total		12	106