



**The Barral Institute**  
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The Barral Institute is a proud member of the  
**International Alliance of Healthcare Educators.**

## **New Manual Articular Approach – Lower Extremity (MALE)**

**EDUCATIONAL CREDIT:** 1.8 CEU/18 hrs  
**WORKSHOP SCHEDULE:** 9:00 a.m. to 5:00 p.m., Lunch break and 2 15-minute daily breaks are incorporated appropriately

This introductory workshop includes lecture, demonstration, and practice for each technique presented.

**COURSE PARTICIPANTS:** Licensed or certified healthcare professionals or students, including Massage Therapists, Physical Therapists, Occupational Therapists, Naturopaths, Athletic Trainers, Chiropractors, Osteopaths, Acupuncturists, Nurses, and other allied healthcare professionals.

### **LEARNER OBJECTIVES:**

- Identify in detail the anatomy and biomechanics of the hip, knee and foot.
- Describe typical pain patterns that arise from dysfunction of these joints, and how they relate to the nerves, vascular system, viscera, muscles, and connective tissue.
- Demonstrate evaluation methods and treatment techniques to facilitate normal functioning of these areas.
- Describe and demonstrate how to evaluate each major joint to determine its primary dysfunction, as well as the anatomical or physiological systems that are contributing to the dysfunction.
- Describe and demonstrate how to treat the anatomical or physiological systems that contribute to the primary dysfunction of each joint.
- Discuss practical integration into treatment sessions.

### **Day One**

9:00 – 12:00      *15 minute break mid-way through*

The Hip

Acetabulum

Labrum

Cartilage

Passive Ligaments

- iliofemoral
- orbicular
- ischiofemoral
- pubofemoral
- iliopectineus
- ligament of head of femur

#### Active Ligaments

#### Muscular connections with the hip

- tensor fascia latae
- gluteus (maximus, medius and minimus)
- piriformis
- obturator internus
- obturator externus
- gemelli
- quadratus femoris
- pectineus and gracilis
- adductor longus and magnus
- rectus femoris
- iliotibial tract
- vastus lateralis, intermedius, medialis

12:00 – 1:30 Lunch

1:30 – 5:00 *15 minute break mid-way through*

#### Adductor canal Adductor hiatus

#### Nervous System

- femoral
- obturator
- saphenous
- sciatic

#### Vascular System

- femoral artery
- descending genicular artery
- internal iliac artery

#### Visceral connections

#### Emotional connections

### **Day Two**

9:00 – 12:00 *15 minute break mid-way through*

## The Knee

- Capsula; articular knee muscles
- Medial retinaculum
- Lateral retinaculum

### Ligaments

- collateral tibial
- collateral fibular
- popliteum arcuatum (arcuate popliteal)
- popliteum obliquum (oblique popliteal)
- anterior cruciate
- posterior cruciate
- transversum genus (transverse)

### Meniscus

### Labrum

### Articular muscles

- Biceps femoris
- Pes anserinus superficial, sartorius, semitendinous and gracilis
- Pes anserinus profundus, semimembranosus
- Gastrocnemius
- Iliotibial tract and tensor fascia latae
- Popliteus

12:00 – 1:30

Lunch

1:30 – 5:00

*15 minute break mid-way through*

### Adductor canal

### Adductor hiatus

### Nerves

- Obturator
- Saphenous
- Sciatic
- Fibular
- Posterior femoral cutaneous

### Arteries

- Descending
- Femoral
- Popliteal
- Genicular

### Visceral connection

- Intestinal

- Genital

Emotional connections

### Day Three

9:00 – 12:00

*15 minute break mid-way through*

The Foot

Distal Tibiofibular Joint

- capsule
- ligaments
- membrana interossea cruris (interosseous membrane)

Bones

- talus-calcaneus mobilization
- cuboid
- navicular and cuneiform mobilization
- metatarsal joint mobilization

Collateral Ligaments

- collateral medial
- collateral lateral
- calcaneofibular ligament
- talocalcaneal ligament
- tibionavicular ligament
- tibiocalcaneal ligament - interosseous

Other Ligaments

- talofibular anterior
- talofibular posterior
- calcaneofibular

12:00 – 1:30

Lunch

1:30 – 5:00

*15 minute break mid-way through*

Nervous system

- plantar nerves
- cutaneous nerves
  - dorsal lateral
  - dorsal medial
  - saphenous
- Morton's disease (metatarsalgia)

Visceral connections

Emotional connections

## Question and Answer