



# MSK Ultrasound Foot and Ankle BachelorClass

The Musculoskeletal Ultrasound Foot & Ankle BachelorClass is an in-depth focused teaching program where you will learn all the necessary basics of musculoskeletal ultrasound of the foot and ankle joint through over 90 short-videos and micro-learning moments to apply this knowledge in your daily practice.

11.5

CME credits

9

Chapters

103

Lectures

8

Quizzes

## Chapter 1 | CME

### Free lectures

#### Lectures & Quizzes:

- Free lecture 1
- Free lecture 2
- Free lecture 3
- Free lecture 4

## Chapter 2 | 2.5 CME

### Introduction to MSK Foot and Ankle

In this chapter, we'll discuss the foundational knowledge necessary to start your ultrasound learning experience. After some general introduction videos, we'll look at how to work with the ultrasound device as well as the sonographic appearance of anatomical structures in the foot and ankle.

#### Lectures & Quizzes:

- First Introduction
- Technology you need
- How to apply in Podiatry clinical care
- Advantages and disadvantages
- Diagnostic value
- Clinical case examples
- Handling the transducer
- Operator variables
- System variables
- Perpendicular scanning and anisotropy
- Muscles, tendons and tendon tunnels
- Bone, joints, joint capsule and synovium
- Ligament and Fascia
- Skin, Subcutaneous tissue and oedema
- Retinaculum, Syndesmosis and periosteum
- Blood, vessels, nerves and arteries
- Cartilage and osteophytes
- Bursae, fat and cysts

- Transducer variables
- Transducer movement language
- Grey values

- Glass, hair, wood, sea shells and metal
- MSK US FAAC - Introduction to MSK

### Chapter 3 | 1 CME

## Anterior Ankle

In this chapter, we'll cover the anterior ankle. We'll first look at the anatomy and normal ultrasound appearance of the structures in the ankle. Finally, we'll have a look at common pathologies seen in this region of the ankle.

### Lectures & Quizzes:

- Chapter Introduction
- Distal tibiotalar joint
- Lateral collateral ligament
- Medial collateral ligament
- The subtalar joint
- Tendons and retinacula
- M. tibialis anterior
- Extensor tendons
- Anterior synovial recess and tibiofibular syndesmosis
- Anterior talofibular ligament, ATFL
- Tibialis anterior
- Anterior ankle impingement
- Anterior ankle impingement demo
- MSK US FAAC - Anterior Ankle

### Chapter 4 | 1 CME

## Lateral Ankle

In this chapter, we'll cover the lateral ankle. We'll first look at the anatomy and sono anatomy. Though demonstrations we'll show you the normal ultrasound appearance of the structures in the lateral ankle. Finally, we'll have a look at common pathologies seen in this region of the ankle.

### Lectures & Quizzes:

- M. peroneus longus
- M. peroneus brevis
- Retinaculum peroneum
- Tuberculum peroneum
- Peroneal tendons and retinaculum
- Ligamentum calcaneofibulare
- Peroneals - tenosynovitis - tendinosis - rupture
- Discussion: Peroneal tendon pathology
- Case Discussion: Peroneal tendons
- Peroneals - instability and anterior ankle - impingement
- MSK US FAAC - Lateral Ankle

### Chapter 5 | 2 CME

## Medial Ankle

In this chapter, we'll cover the medial ankle. We'll first look at the anatomy and normal ultrasound appearance of the structures in the medial ankle, through theory presentations and live demonstrations. Finally, we'll have a look at common pathologies seen in this region of the ankle.

### Lectures & Quizzes:

- M. tibialis posterior
- M. flexor hallucis longus
- M. flexor digitorum longus
- M. soleus
- Tibial nerve
- Arteria tibialis posterior and vena comitans
- M. abductor hallucis
- Tibial groove of the tibialis posterior tendon
- M. tibialis posterior
- M. flexor digitorum longus
- M. flexor hallucis longus
- Medioposterior tarsal tunnel overview
- M. soleus
- M. abductor hallucis
- Medial malleolus
- Abnormalities of the tibialis posterior tendon
- Accessory os naviculare / os tibiale externus type 1,2,3
- Discussion: Tibialis tendon pathology
- MSK US FAAC - Medial Ankle

## Chapter 6 | 1 CME

# Posterior Ankle

In this chapter, we'll cover the posterior ankle. We'll first look at the anatomy and normal ultrasound appearance of the structures in the posterior ankle. Finally, we'll have a look at common pathologies seen in this region of the ankle.

### Lectures & Quizzes:

- Achilles tendon retrocalcaneal
- Achilles tendon pre-insertional and midportion
- Achilles tendon
- Kager's fat body
- Midportion and preinsertional pathology of the Achilles tendon
- Preinsertional and insertional pathology of the Achilles tendon
- Discussion: Achilles tendon pathology
- Posterior impingement - stenosis of the FHL
- Case Discussion: Hallucis longus
- MSK US FAAC - Posterior Ankle

## Chapter 7 | 1 CME

# Dorsal Foot

In this chapter, we'll cover the dorsal foot. We'll have a look at the anatomy and sono anatomy of the dorsal foot. Through live demonstrations, we'll show normal ultrasound findings and scanning techniques. And finally, we'll have a look at common pathologies seen in this region of the foot.

### Lectures & Quizzes:

- Osseous and articular
- Skin, fascia and retinacula
- Extensor tendons
- M. extensor hallucis longus
- M. extensor digitorum longus
- Tarsus
- M. extensor hallucis longus and m. extensor digitorum longus
- Osteoarthritis and synovitis of the dorsal foot
- Case Discussion: Fractures
- MSK US FAAC - Dorsal Foot

## Plantar Foot

In this chapter, we'll cover the plantar foot. We'll have a look at the anatomy and sono anatomy of the plantar foot. Through live demonstrations, we'll show normal ultrasound findings and scanning techniques. After having discussed the normal situation, we'll start looking at pathology findings and scanning techniques to uncover abnormalities of the plantar foot.

### Lectures & Quizzes:

- Soft tissue plantar foot and fascia plantaris
- Extrinsic muscles and tendons
- Subcalcaneal fat chamber structure
- Fascia plantaris, central and lateral bundle
- Extrinsic tendons of the foot
- Fasciitis plantaris, fascial ruptures, plantar fibromatosis, fat chamber lesion
- Case Discussion: Fibromatosis
- Pathological findings and scanning technique fat chambers
- MSK US FAAC - Plantar Foot

## Toes Region

In this last chapter, we'll have a look at the toe region. Again, we'll cover the anatomy and sono anatomy, followed by live demonstrations to show normal ultrasound findings and scanning techniques. We'll also have a look at the most commonly seen pathologies in the toe region. Finally, we'll close this e-learning course with some miscellaneous pathologies and ultrasound pitfalls.

### Lectures & Quizzes:

- First metatarsophalangeal joint complex and interphalangeal joint
- Lesser toes
- Common plantar digital nerves
- Subcapital structures - cartilage, plate, tendon, sheath, fat chambers
- Second and third webspace plantar common digital nerve - Morton neuroma
- Discussion: Morton's Neuroma
- Case Discussion: Avascular necrosis
- Swelling & Tumours
- Ultrasound cases and pitfalls
- Course Outro
- MSK US FAAC - Toe Region