



# MSK BachelorClass 2023

After completion of this online course, the professional is capable of using MSK ultrasound in clinical practice in a qualitative and critical way.

**19.75**  
CME credits

**34**  
Chapters

**283**  
Lectures

**33**  
Quizzes

Chapter 1 | **CME**

## Free lectures

### Lectures & Quizzes:

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

Chapter 2 | **0.75 CME**

## Introduction

In this chapter, we'll cover the basics of MSK ultrasound. We'll look at what technology you need, the physics and how anatomical tissues look like with ultrasound. In addition, we'll cover the checklist for qualitative scanning and discuss the importance of clinical reasoning

### Lectures & Quizzes:

- Welcome and introduction
- Introducing the speakers & disclosures
- Introduction in MSK ultrasound
- The technology you need
- Background of diagnostic MSK ultrasound
- Purposes to use MSK ultrasound in clinical practice
- Advantages and disadvantages
- MSK BC upd - Introduction

Chapter 3 | **1 CME**

## Physics & artefacts

In this chapter, we'll cover the physics of ultrasound as well as the artifacts that one should be aware of.

### Lectures & Quizzes:

- Physics: Sound
- Physics: Sound made by transducers
- Artifacts due to beam characteristics
- Artifacts due to attenuation errors
- Artifacts due to multiple echoes
- Grey values
- Ultrasound language
- Hygiene
- Safety
- MSK BC upd - Physics & artefacts

Chapter 4 | 0.75 CME

## Anatomical tissues

In this chapter, we'll take a look at the ultrasound characteristics of various musculoskeletal structures.

### Lectures & Quizzes:

- Muscles in ultrasound
- Tendon in ultrasound
- Nerve in ultrasound
- Bone and cartilage in ultrasound
- Bursae in ultrasound
- Capsules and ligaments in ultrasound
- MSK BC upd - Anatomical tissues

Chapter 5 | 0.75 CME

## Scanning

In this chapter, we'll discuss the proper technique to create qualitative scanning using the scanning checklist.

### Lectures & Quizzes:

- Handling the transducer
- SonoSkills Scanning Checklist: Operator
- SonoSkills Scanning Checklist: System
- SonoSkills Scanning Checklist: Transducer
- SonoSkills pathology checklist
- SonoSkills pathology checklist: case 1
- SonoSkills pathology checklist: case 2
- MSK BC upd - Scanning

Chapter 6 | 0.5 CME

## Clinical reasoning

In this chapter, we'll discuss how to implement clinical reasoning with your daily MSK ultrasound examination.

### Lectures & Quizzes:

- Brief introduction to clinical reasoning
- Predictive values

- Diagnostic errors and biases
- Diagnostic strategies
- Sensitivity & specificity
- Diagnostic gain
- MSK BC upd - Clinical reasoning

Chapter 7 | 0.5 CME

## Biceps

In this chapter, we'll look at the anatomy, sonoanatomy, scan demonstration and pathology of the long head of the biceps.

### Lectures & Quizzes:

- Long head of biceps - anatomy
- Long head of biceps - sonoanatomy
- Long head of the biceps tendon - hands on SAX
- Long head of the biceps tendon - hands on LAX
- Long head of the biceps tendon - sonopathology
- MSK BC upd - Biceps

Chapter 8 | 0.5 CME

## Subscapularis

In this chapter, we'll look at the anatomy, sonoanatomy, scan demonstration and pathology of the subscapularis.

### Lectures & Quizzes:

- Subscapularis - anatomy
- Subscapularis - sonoanatomy
- Subscapularis - hands on LAX
- Subscapularis - hands on SAX
- Subscapularis - sonopathology
- MSK BC upd - Subscapularis

Chapter 9 | 0.25 CME

## Coracoacromial ligament & SASD bursa

In this chapter, we'll look at the anatomy, sonoanatomy, scan demonstration and pathology of the coracoacromial ligament. Also, we'll learn the anatomy, sonoanatomy and pathology of the SASD bursa.

### Lectures & Quizzes:

- Coracoacromial ligament - anatomy
- Coracoacromial ligament - sonoanatomy
- Coracoacromial ligament - hands on LAX
- Coracoacromial ligament - sonopathology
- SASD bursa - (sono)anatomy
- SASD bursa - sonopathology
- MSK BC upd - Coracoacromial ligament & SASD bursa

Chapter 10 | 0.25 CME

# SSP anatomy

In this chapter, we'll look at the anatomy and sonoanatomy of the supraspinatus.

## Lectures & Quizzes:

- Supraspinatus tendon - anatomy
- Supraspinatus tendon - sonoanatomy
- Supraspinatus subacromial - sonoanatomy
- MSK BC upd - SSP anatomy

Chapter 11 | 0.25 CME

# SSP Demo

In this chapter, we'll cover all transducer positions of the supraspinatus.

## Lectures & Quizzes:

- Supraspinatus tendon - hands on SAX Modified Crass
- Supraspinatus tendon - hands on SAX Crass
- Supraspinatus tendon - hands on LAX Modified Crass
- Supraspinatus tendon - hands on LAX Crass
- Supraspinatus impingement - hands on LAX
- MSK BC upd - SSP Demo

Chapter 12 | 0.5 CME

# SSP pathology

In this chapter, we'll discuss sonopathology of the supraspinatus.

## Lectures & Quizzes:

- Rotator cuff calcification - sonopathology
- Rotator cuff tendinopathy - sonopathology
- Subacromial impingement - sonopathology
- Supraspinatus tendon tears in general - sonopathology
- Supraspinatus partial tear - sonopathology
- Supraspinatus full thickness tendon tears - sonopathology
- Supraspinatus complete tendon tears - sonopathology
- MSK BC upd - SSP pathology

Chapter 13 | 0.25 CME

# AC joint

In this chapter, we'll look at the anatomy, sonoanatomy, scan demonstration and sonopathology of the AC joint.

## Lectures & Quizzes:

- AC joint anatomy
- AC joint sonoanatomy
- Acromioclavicular joint
- AC joint - sonopathology
- MSK BC upd - AC joint

Chapter 14 | 0.25 CME

## Infraspinatus/teres minor

In this chapter, we'll look at the anatomy, sonoanatomy, scan demonstration and sonopathology of the infraspinatus/teres minor.

### Lectures & Quizzes:

- Infraspinatus / teres minor - anatomy
- Infraspinatus / teres minor - sonoanatomy
- Infraspinatus/Teres minor tendon - hands on LAX
- Infraspinatus/Teres minor tendon - hands on SAX
- Infraspinatus / teres minor - sonopathology
- MSK BC upd - Infraspinatus/teres minor

Chapter 15 | 0.75 CME

## Lateral elbow

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the lateral elbow.

### Lectures & Quizzes:

- Common extensor tendon - anatomy
- Common extensor tendon - sonoanatomy
- Humeroradial joint - anatomy
- Humeroradial joint - sonoanatomy
- Common extensor tendon - hands-on LAX
- Common extensor tendon - hands-on SAX
- Humeroradial joint - hands-on
- Common extensor tendon - sonopathology
- Humeroradial joint - sonopathology
- MSK BC upd - Lateral elbow

Chapter 16 | 0.75 CME

## Ventral elbow

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the ventral elbow.

### Lectures & Quizzes:

- Ventral lateral elbow - anatomy
- Ventral lateral elbow - sonoanatomy
- Ventrolateral "radial" corner - Hands-on SAX
- Ventral elbow - anatomy
- Ventral elbow - sonoanatomy
- Ventral "brachial" corner - Hands-on SAX
- Ventral medial elbow - anatomy
- Ventral medial elbow - sonoanatomy
- Ventromedial "medial" corner - Hands-on SAX
- Ventral elbow - Hands-on - LAX
- Ventral elbow - sonopathology
- MSK BC upd - Ventral elbow

## Medial elbow

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the medial elbow.

### Lectures & Quizzes:

- Humeroulnar joint - anatomy
- Humeroulnar joint - sonoanatomy
- Common flexor tendon - anatomy
- Common flexor tendon - sonoanatomy
- Humeroulnar joint - hands-on LAX
- Common flexor tendon and humeroulnar joint - hands-on LAX
- Common flexor tendon - hands-on SAX
- Humeroulnar joint - Sonopathology
- Common flexor tendon - Sonopathology
- MSK BC upd - Medial elbow

## Dorsal elbow

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the dorsal elbow.

### Lectures & Quizzes:

- Triceps tendon and olecranon - anatomy
- Triceps tendon and olecranon - sonoanatomy
- Triceps tendon - hands-on LAX
- Triceps tendon - hands-on SAX
- Triceps tendon and olecranon - sonopathology
- Cubital tunnel - anatomy
- Cubital tunnel - sonoanatomy
- Cubital tunnel - hands-on SAX
- Cubital tunnel - hands-on LAX
- Cubital tunnel - sonopathology
- MSK BC upd - Dorsal elbow

## Dorsal wrist

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the dorsal wrist.

### Lectures & Quizzes:

- Extensor compartment - anatomy
- Extensor compartment - sonoanatomy
- Extensor compartment 1 - hands-on SAX
- Extensor compartment 2 - hands-on SAX
- Extensor compartment 3 - hands-on SAX
- Extensor compartment 4 - hands-on SAX
- Extensor compartment 5 - hands-on SAX
- Dorsal wrist joints - anatomy
- Dorsal wrist joints - sonoanatomy
- Scapholunate ligament - hands-on LAX
- Distal radioulnar joint - hands-on LAX
- Radiocarpal and midcarpal joints - hands-on LAX
- Triangular fibrocartilage complex - hands-on LAX
- Dorsal wrist joints - Sonopathology

- Extensor compartment 6 - hands-on SAX
- Extensor compartment - sonopathology
- MSK BC upd - Dorsal wrist

Chapter 20 | 0.75 CME

## Palmar wrist

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the palmar wrist.

### Lectures & Quizzes:

- Carpal tunnel - anatomy
- Carpal tunnel - sonoanatomy
- Proximal carpal tunnel - hands-on SAX
- Distal carpal tunnel - hands-on SAX
- Median nerve in carpal tunnel - hands-on LAX
- Ulnar nerve in Guyon's/ulnar tunnel - hands-on SAX
- Median nerve - Sonopathology
- Ulnar nerve - sonopathology
- Flexor pollicis longus tendon - anatomy
- Flexor pollicis longus tendon - sonoanatomy
- Flexor pollicis longus tendon - hands-on SAX
- Flexor pollicis longus tendon - hands-on LAX
- Flexor pollicis longus tendon - sonopathology
- MSK BC upd - Palmar wrist

Chapter 21 | 1 CME

## Ventral hip

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the ventral hip.

### Lectures & Quizzes:

- Hip joint - anatomy
- Hip joint - sonoanatomy
- Hip joint, recess and iliopsoas complex - hands-on LAX
- Hip joint - sonopathology
- Rectus femoris direct tendon - anatomy
- Rectus femoris direct tendon - sonoanatomy
- Rectus femoris direct tendon - hands-on SAX
- Rectus femoris direct tendon - hands-on LAX
- Rectus femoris direct tendon - sonopathology
- Femoral neurovascular bundle - anatomy
- Femoral neurovascular bundle - sonoanatomy
- Femoral neurovascular bundle - hands-on SAX
- Sartorius - anatomy
- Sartorius - sonoanatomy
- Sartorius tendon/muscle - hands-on SAX
- MSK BC upd - Ventral hip

Chapter 22 | 0.25 CME

## Medial hip

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the medial hip.

### Lectures & Quizzes:

- Adductors - anatomy
- Adductors - sonoanatomy
- Adductors - hands-on LAX
- Adductors - hands-on SAX
- Adductors - sonopathology
- MSK BC upd - Medial hip

Chapter 23 | 0.5 CME

## Lateral hip

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the lateral hip.

### Lectures & Quizzes:

- Tensor fascia latae - anatomy
- Tensor fascia latae - sonoanatomy
- Tensor fasciae latae - hands-on SAX
- Tensor fasciae latae - hands-on LAX
- Greater trochantor - anatomy
- Greater trochantor - sonoanatomy
- Gluteus medius, gluteus minimus, trochanter bursa - hands-on SAX
- Gluteus medius, gluteus minimus, trochanter bursa - hands-on LAX
- Greater trochantor - sonopathology
- MSK BC upd - Lateral hip

Chapter 24 | 0.75 CME

## Dorsal hip

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the dorsal hip.

### Lectures & Quizzes:

- Hamstrings part 1 - anatomy
- Hamstrings part 2 - anatomy
- Hamstrings - sonoanatomy
- Hamstrings - hands-on SAX
- Hamstrings - hands-on LAX
- Hamstrings - sonopathology
- Sciatic nerve - anatomy
- Sciatic nerve - sonoanatomy
- Sciatic nerve - hands-on SAX
- Sciatic nerve - hands-on LAX
- Sciatic nerve - sonopathology
- MSK BC upd - Dorsal hip

Chapter 25 | 1.25 CME

## Ventral knee

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the ventral knee.

### Lectures & Quizzes:

- Suprapatellar - anatomy
- Suprapatellar - sonoanatomy
- Suprapatellar - hands-on LAX
- Infrapatellar - sonoanatomy
- Infrapatellar - hands-on LAX
- Infrapatellar - hands-on SAX

- Suprapatellar - hands-on SAX
- Suprapatellar - sonopathology
- Prepatellar - anatomy
- Prepatellar - sonoanatomy
- Prepatellar - hands-on LAX
- Prepatellar - sonopathology
- Infrapatellar - anatomy
- Infrapatellar - sonopathology
- Femoral trochlea - anatomy
- Femoral trochlea - sonoanatomy
- Trochlea - hands-on SAX
- Femoral trochlea - sonopathology
- MSK BC upd - Ventral knee

Chapter 26 | 0.75 CME

## Medial knee

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the medial knee.

### Lectures & Quizzes:

- Medial patellofemoral joint - anatomy
- Medial patellofemoral joint - sonoanatomy
- Patellofemoral joint, medial patellofemoral ligament - hands-on LAX
- Medial patellofemoral joint - sonopathology
- Medial knee joint - anatomy
- Medial knee joint - sonoanatomy
- Medial collateral ligament, medial meniscus, pes anserinus - hands-on LAX
- Medial knee joint - sonopathology
- MSK BC upd - Medial knee

Chapter 27 | 0.5 CME

## Dorsomedial & Dorsal knee

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the dorsomedial and dorsal knee.

### Lectures & Quizzes:

- Dorsomedial knee - anatomy
- Dorsomedial knee - sonoanatomy
- Medial tendons, semimembranosus gastrocnemius bursa - hands-on SAX
- Medial tendons, semimembranosus gastrocnemius bursa - hands-on LAX
- Dorsomedial knee - sonopathology
- Popliteal fossa - anatomy
- Popliteal fossa - sonoanatomy
- Neurovascular bundle, popliteal fossa - hands-on SAX
- Popliteal fossa - sonopathology
- MSK BC upd - Dorsomedial & Dorsal knee

Chapter 28 | 0.5 CME

## Dorsolateral knee

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the dorsolateral knee.

## Lectures & Quizzes:

- Dorsolateral knee - anatomy
- Dorsolateral knee - sonoanatomy
- Knee joint, fabella, posterior horn lateral meniscus - hands-on LAX
- Dorsolateral knee - sonopathology
- Biceps femoris insertion - anatomy
- Biceps femoris insertion - sonoanatomy
- Long and short head of the biceps femoris - hands-on LAX
- Long and short head of the biceps femoris - hands-on SAX
- Biceps femoris insertion - sonopathology
- Common peroneal nerve - anatomy
- Common peroneal nerve - sonoanatomy
- Common peroneal nerve - hands-on SAX
- Common peroneal nerve - sonopathology
- MSK BC upd - Dorsolateral knee

Chapter 29 | 0.5 CME

## Lateral knee

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the lateral knee.

## Lectures & Quizzes:

- Lateral knee joint - anatomy
- Lateral knee joint - sonoanatomy
- Lateral knee: Lateral collateral ligament, lateral meniscus - hands-on LAX
- Lateral knee joint - sonopathology
- Iliotibial band insertion - anatomy
- Iliotibial band insertion - sonoanatomy
- Iliotibial band insertion - hands-on LAX
- Iliotibial band insertion - sonopathology
- MSK BC upd - Lateral knee

Chapter 30 | 0.25 CME

## Heel

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the heel region.

## Lectures & Quizzes:

- Plantar fascia - anatomy
- Plantar fascia - sonoanatomy
- Plantar fascia - hands-on LAX
- Plantar fascia - hands-on SAX
- Plantar fascia - sonopathology
- MSK BC upd - Heel

Chapter 31 | 0.5 CME

## Dorsal ankle

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the dorsal ankle.

### Lectures & Quizzes:

- Achilles tendon and calf - anatomy
- Achilles tendon and calf - sonoanatomy
- Achilles tendon, gastrocnemius muscle, soleus muscle - longitudinal
- Achilles tendon, gastrocnemius muscle, soleus muscle - transverse
- Achilles tendon and calf - sonopathology
- MSK BC upd - Dorsal ankle

Chapter 32 | 1 CME

## Lateral ankle

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the lateral ankle.

### Lectures & Quizzes:

- Peroneal tendons - anatomy
- Peroneal tendons - sonoanatomy
- Peroneus longus and brevis - transverse
- Peroneus longus and brevis - longitudinal
- Peroneal tendons - sonopathology
- Calcaneofibular ligament - anatomy
- Calcaneofibular ligament - sonoanatomy
- Calcaneofibular ligament - longitudinal
- Calcaneofibular ligament - sonopathology
- Anterior talofibular ligament - anatomy
- Anterior talofibular ligament - sonoanatomy
- Anterior talofibular ligament - longitudinal
- Anterior talofibular ligament - sonopathology
- Anterior tibiofibular ligament - anatomy
- Anterior tibiofibular ligament - sonoanatomy
- Anterior tibiofibular ligament, syndesmosis - longitudinal
- Anterior tibiofibular ligament - sonopathology
- MSK BC upd - Lateral ankle

Chapter 33 | 0.25 CME

## Ventral ankle

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the ventral ankle.

### Lectures & Quizzes:

- Anterior ankle joint and tendons - anatomy
- Anterior ankle joint and tendons - sonoanatomy
- Talar dome, tibialis anterior, ext. hallucis longus, ext. digitorum longus - longitudinal
- Talar dome, tibialis anterior, ext. hallucis longus, ext. digitorum longus - transverse
- Talar dome, tibialis anterior, ext. hallucis longus, ext. digitorum longus - transverse
- Anterior ankle joint and tendons - sonopathology
- MSK BC upd - Ventral ankle

Chapter 34 | 0.5 CME

## Medial ankle

In this chapter, we'll cover the anatomy, sonoanatomy, scan demonstration and sonopathology of the medial ankle.

## Lectures & Quizzes:

- Tarsal tunnel - anatomy
- Tarsal tunnel - sonoanatomy
- Tibialis posterior, flexor digitorum longus, flexor hallucis longus, neurovascular bundle - transverse
- Tarsal tunnel - sonopathology
- Deltoid ligament - anatomy
- Deltoid ligament - sonoanatomy
- Deltoid ligament - longitudinal
- Deltoid ligament - sonopathology
- MSK BC upd - Medial ankle