



## **Introduction to Musculoskeletal Ultrasound**

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### **Course information**

Code number: SC0010  
Title: Introduction to Musculoskeletal Ultrasound  
Faculty: Konstantinos Triantafyllias, Rheumatologist  
Venue: Panorama Hotel  
Analipseos 26 Panorama,  
Thessaloniki, PC 55236, Greece

Date: 26.09.26

Level of education: Advanced

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### **Contact information**

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### **Course pre-requisites**

MD Degree from an internationally approved Faculty of Medicine

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## **Course description**

Ultrasound of musculoskeletal system has been established as a particularly useful tool in modern rheumatological clinical practice, essentially complementing the clinical examination in the evaluation of inflammatory and degenerative diseases. It is a portable, radiation-free imaging method that allows direct visualisation of joints, tendons, bursae and entheses, while providing at the same time real time information on the presence of synovitis, tendinopathy, bursitis, fluid collection and enthesitis, as well as structural alterations.

This informational seminar is designed to highlight the basic principles of musculoskeletal ultrasound, proper image adjustment/ optimisation and systematic identification of the main anatomical structures, with emphasis on the interpretation of findings in Gray Scale and Power Doppler. The hands on approach will focus mainly on rheumatological pathologies, with extension to important orthopedic differential diagnoses and will focus on three main joints: the wrist, the shoulder and the knee.

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### **Learning objectives**

- Understanding of the fundamental physics of ultrasonography
- Image optimization and operation, adjustment of ultrasound equipment
- Understanding of advanced cross sectional area ultrasound anatomy of the musculoskeletal system
- Identification of pathological findings in the most common rheumatological pathologies, enhancing clinical assessment and diagnostic accuracy.
- Interpretation of normal/pathological findings in everyday clinical scenarios, with focus on three main joints: the wrist, the shoulder and the knee.

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### **Suggested Course Material**

J. Katz, K. Brindle. MRI and Ultrasound in the Diagnosis and Management of Rheumatological Diseases. Annals of the New York Academy of Sciences, 2009

J. Jacobson. Fundamentals of Musculoskeletal Ultrasound (Fundamentals of Radiology). Elsevier 2025