



The SonoSim Ultrasound Training Solution in Accordance with European Core Curriculum For Emergency Medicine

In 2019, members of the Educational Committee of European Society for Emergency Medicine (EUSEM) and the Emergency Medicine Examination Reference Group in Europe (EMERGE), on behalf of the European Union of Medical Specialists (UEMS) Section of Emergency Medicine, released a revised version of the [European Core Curriculum for Emergency Medicine](#). The curriculum “lists the problems that specialists in Emergency Medicine should be able to address, the conditions they should be able to recognise and initially manage, the procedures they should be able to carry out, the investigations they should be able to interpret, and the overarching competences they should master.”¹

The award-winning, patented SonoSim Ultrasound Training Solution matches the Point-of-Care Ultrasound section of these industry recommendations through an ecosystem of cloud-based courses, knowledge assessments, interactive SonoSimulator® scanning cases, performance tracking, and access to real patient pathology.

Focused Cardiac Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Pericardial fluid/tamponade	<i>Cardiology Core Clinical: Case Studies</i> <i>Pericardiocentesis: Introduction, Regional Anatomy, Sonographic Anatomy</i>	<i>Cardiology Core Clinical Cases</i> <i>Pericardiocentesis Cases</i>
Decreased contractility/left ventricular function	<i>FoCUS Part I: Cardiac Output Measurements, Case Studies</i> <i>FoCUS Part II: Echocardiographic Technique, Valvular Regurgitation</i>	<i>SonoSim LiveScan® Cardiac Resuscitation Scenarios</i>
Dilated right ventricle	<i>Cardiology Core Clinical: Case Studies</i> <i>FoCUS Part II: Introduction</i>	<i>Cardiology Core Clinical Cases</i> <i>RUSH Cases</i> <i>FoCUS Part I Cases</i> <i>LVAD Cases</i> <i>SonoSim LiveScan® Cardiac Resuscitation, Critical Care, & Late Stage Pregnancy Scenarios</i>
Inferior vena cava assessment	<i>Aorta/IVC Core Clinical: IVC Evaluation & CVP</i> <i>FoCUS Part I: Pulmonary Artery Pressure Measurements</i> <i>FoCUS Part II: Valvular Regurgitation</i>	<i>Aorta/IVC Anatomy & Physiology Cases</i> <i>Aorta/IVC Core Clinical Cases</i> <i>Cardiology Core Clinical Cases</i> <i>eFAST Cases</i> <i>RUSH Cases</i> <i>FoCUS Part I & II Cases</i> <i>Pericardiocentesis Cases</i> <i>SonoSim LiveScan® Cardiac Resuscitation, Critical Care, Early Stage Pregnancy, Late Stage Pregnancy, & Trauma Care Scenarios</i> <i>Vascular Challenge Cases</i>

¹ European Society for Emergency Medicine, Emergency Medicine Examination Reference Group in Europe, UEMS Section of Emergency Medicine. *European Core Curriculum for Emergency Medicine*. 2019 March 16.

Lung Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Pleural fluid	<i>eFAST: Sonographic Anatomy & Technique, Imaging Tips & Pitfalls</i> <i>Pulmonary Core Clinical: Case Studies: Pleural Effusion</i> <i>Advanced Pediatric Lung Sonography: Sonographic Anatomy, Case Studies</i> <i>Thoracentesis: Sonographic Anatomy, Procedure Preparation, Procedure Steps</i>	<i>Cardiology Core Clinical Cases</i> <i>eFAST Cases</i> <i>Pulmonary Core Clinical Cases</i> <i>FoCUS Part I & II Cases</i> <i>LVAD Problem-Focused Echocardiography Cases</i> <i>Advanced Pediatric Lung Sonography Cases</i> <i>Resuscitative TEE Cases</i> <i>Pericardiocentesis Cases</i> <i>Thoracentesis Cases</i> <i>Pulmonary Challenge Cases</i> <i>SonoSim LiveScan® Cardiac Resuscitation & Trauma Care Scenarios</i>
Pulmonary consolidation	<i>Pulmonary Core Clinical: Case Studies: Lung Consolidation</i> <i>Advanced Pediatric Lung Sonography: Sonographic Anatomy, Sonographic Technique, Case Studies</i>	<i>Pulmonary Core Clinical Cases</i> <i>RUSH Cases</i> <i>Advanced Pediatric Lung Sonography Cases</i> <i>Thoracentesis Cases</i> <i>Pulmonary Challenge Cases</i> <i>SonoSim LiveScan® Critical Care Scenarios</i>
Pneumothorax	<i>Pulmonary Core Clinical: Case Studies: Pneumothorax Rule-Out, Case Studies: Pneumothorax Rule-In</i> <i>Advanced Pediatric Lung Sonography: Sonographic Anatomy, Case Studies</i>	<i>eFAST Cases</i> <i>Pulmonary Core Clinical Cases</i> <i>Advanced Pediatric Lung Sonography Cases</i> <i>SonoSim LiveScan® Cardiac Resuscitation & Trauma Care Scenarios</i>
Interstitial syndromes	<i>Pulmonary Core Clinical: Case Studies: Alveolar Interstitial Syndrome</i> <i>Advanced Pediatric Lung Sonography: Sonographic Anatomy, Case Studies</i>	<i>Pulmonary Core Clinical Cases</i> <i>RUSH Cases</i> <i>Advanced Pediatric Lung Sonography Cases</i> <i>Thoracentesis Cases</i> <i>Pediatric Challenge Cases</i> <i>SonoSim LiveScan® Cardiac Resuscitation & Critical Care Scenarios</i>
FAST (Focused Assessment with Sonography in Trauma) Abdominal Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
FAST (Focused Assessment with Sonography in Trauma)	<i>FAST: All Lessons</i> <i>eFAST: All Lessons</i>	<i>FAST Cases</i> <i>eFAST Cases</i>

Abdominal Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Hydronephrosis	<i>Renal Core Clinical: Obstructive Uropathy, Case Studies</i>	<i>Intestinal/Biliary Core Clinical Cases</i> <i>Renal Core Clinical Cases</i> <i>Genitourinary Challenge Cases</i> <i>SonoSim LiveScan® Early Stage Pregnancy, Genitourinary, & Late Stage Pregnancy Scenarios</i>
Distended urinary bladder	<i>Bladder Anatomy & Physiology: Bladder Volume Measurement</i> <i>Bladder Core Clinical: Case Pathologies, Bladder Volume</i>	<i>Bladder Core Clinical Cases</i> <i>Intestinal/Biliary Core Clinical Cases</i> <i>Advanced GYN Normal Uterus Cases</i> <i>Genitourinary Challenge Cases</i>
Abdominal aorta measurement	<i>Aorta/IVC Core Clinical: Case Studies</i>	<i>Aorta/IVC Core Clinical Cases</i> <i>Vascular Challenge Cases</i> <i>SonoSim LiveScan® Critical Care Scenarios</i>
Gallstones	<i>Intestinal/Biliary Core Clinical: Sonographic Anatomy, Case Studies</i>	<i>Intestinal/Biliary Core Clinical Cases</i> <i>Abdomen Challenge Cases</i> <i>Genitourinary Challenge Cases</i> <i>SonoSim LiveScan® Hepatobiliary Scenarios</i>
Cholecystitis		<i>Intestinal/Biliary Core Clinical Cases</i> <i>RUSH Cases</i> <i>Abdomen Challenge Cases</i> <i>SonoSim LiveScan® Early Stage Pregnancy, Hepatobiliary, & Late Stage Pregnancy Scenarios</i>
Small bowel obstruction	<i>Intestinal/Biliary Core Clinical: Case Studies</i>	<i>Intestinal/Biliary Core Clinical Cases</i> <i>Abdomen Challenge Cases</i>
Intrauterine pregnancy	<i>OB/GYN Core Clinical: Embryology, Pathologic Conditions</i> <i>First-Trimester Pregnancy: All Lessons</i> <i>Second- & Third-Trimester Pregnancy Part I & II: All Lessons</i>	<i>OB/GYN Core Clinical Cases</i> <i>RUSH Cases</i> <i>First-Trimester Pregnancy Cases</i> <i>Second- & Third-Trimester Pregnancy Part I & II Cases</i> <i>OB/GYN Challenge Cases</i> <i>SonoSim LiveScan® Critical Care, Early Stage Pregnancy, & Late Stage Pregnancy Scenarios</i>
Soft-Tissue Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Foreign body	<i>Soft Tissue Core Clinical: Sonographic Anatomy, Foreign Bodies, Case Studies</i>	--
Fluid collection/abscess	<i>Soft Tissue Core Clinical: Sonographic Anatomy, Sonographic Technique, Advanced Abscess Evaluation, Peritonsillar Abscess</i>	<i>Soft Tissue Core Clinical Cases</i> <i>Musculoskeletal Challenge Cases</i>
Cellulitis	<i>Soft Tissue Core Clinical: Sonographic Anatomy, Sonographic Technique, Advanced Abscess Evaluation</i>	<i>Soft Tissue Core Clinical Cases</i>

Proximal Deep Venous Thrombosis		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Proximal deep venous thrombosis	<i>DVT – Lower Extremity Core Clinical:</i> All Lessons <i>RUSH:</i> Sonographic Anatomy, Sonographic Technique, Imaging Tips & Pitfalls, Case Studies	<i>DVT – Lower Extremity Core Clinical Cases</i> <i>RUSH Cases</i> <i>SonoSim LiveScan® Critical Care Scenarios</i>
Ultrasound-Guided Procedures		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Peripheral/central vascular access	<i>Peripheral Venous Access:</i> All Lessons <i>Ultrasound-Guided Femoral Line Placement:</i> All Lessons <i>Ultrasound-Guided Internal Jugular Vein Cannulation:</i> All Lessons <i>Ultrasound-Guided Femoral Line Placement:</i> All Lessons	<i>Peripheral Venous Access Cases</i> <i>Ultrasound-Guided Femoral Line Placement Cases</i> <i>Ultrasound-Guided Internal Jugular Vein Cannulation Cases</i> <i>Ultrasound-Guided Femoral Line Placement Cases</i>
Pericardiocentesis	<i>Pericardiocentesis:</i> All Lessons	<i>Pericardiocentesis Cases</i>
Musculoskeletal Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Identification of:		
Tendon injury	<i>Musculoskeletal Core Clinical:</i> Sonographic Anatomy, Sonographic Technique, Case Studies	<i>Musculoskeletal Challenge Cases</i>
Dislocation	<i>Musculoskeletal Core Clinical:</i> Sonographic Technique, Case Studies	
Joint effusion		<i>Musculoskeletal Core Clinical Cases</i>
Fracture	<i>Musculoskeletal Core Clinical:</i> Sonographic Anatomy, Case Studies	<i>Musculoskeletal Challenge Cases</i> <i>Pediatric Challenge Cases</i>
Ocular Ultrasound		
Core Competency	SonoSim Courses	SonoSimulator® Cases
Identification of:		
Globe rupture	<i>Ocular Core Clinical:</i> Ocular Trauma	<i>Ocular Core Clinical Cases</i>
Intraocular foreign body		
Retinal detachment	<i>Ocular Core Clinical:</i> Retinal Detachment	
Elevated intracranial pressure	<i>Ocular Core Clinical:</i> Optic Nerve Evaluation & ICP	
Eye movement	<i>Ocular Core Clinical:</i> Sonographic Technique	
Vitreous hemorrhage	<i>Ocular Core Clinical:</i> Vitreous Hemorrhage	

Not Covered: Ultrasound-Guided Procedures, Nerve blocks; Ocular Ultrasound, Pupillary reflex