

# EMERGENCY ULTRASOUND COURSE

## **Introduction**

The use of US in the Emergency Department (ED) is rapidly growing and became a bedside clinical test.

The use of ED US enables clinicians to reach diagnosis in a shorter time which reduces the length of stay in ED rather than waiting for US to be done in the busy imaging department which decreases patient satisfaction.

Importantly, the use of ED US increases the diagnostic accuracy and improves patient care by prompt diagnosis of urgent and emergent conditions when the radiologist is unavailable or busy.

US can be widely used to perform diagnostic and therapeutic procedures (e.g. insertion of central lines, joint aspiration...etc) with a high degree of safety and reliability.

## **Course Duration**

Two days

## **Target Groups:**

1. Emergency Physicians
2. Intensivists
3. Surgeons
4. Internists
5. Pediatricians
6. Anaesthesiologists

## **Accreditation**

The course is accredited by the College of Emergency Medicine (CEM), UK

## **Credit Hours**

The course is equivalent to 16 HAAD category 1 credit hours

## **Certificate**

Valid for 2 years

## **Faculty**

## **Organizer**

Dr Gamal Abbas

## **Course Format**

1. Course manual to be given to participants at least 3 weeks before the courses date
2. Pre Course MCQ's

### Teaching Methodology

1. Interactive lectures
2. Clinical scenarios
3. Image Quiz
4. Hands-on training

## **Assessment**

1. Continual evaluation during clinical scenarios and hands-on training
2. Post Course MCQ's

## **Topics**

1. Basics of Ultrasound (Physics made easy)
2. Knobology (how to use the knobs and buttons on the US machine)
3. FAST (Focused Abdominal Sonography for Trauma) and eFAST
4. Echoigraphy for ED
5. First Trimester Us

6. Vascular Doppler (Abdominal Aortic Aneurysm; AAA and DVT)
7. Abdominal US (Kidneys, bladder, Gall Bladder, Liver...etc)
8. Other Uses of US in ED (Chest/Ocular US/Fractures)
9. Procedures
  - a. Peripheral Venous Cannulation
  - b. Pleural aspiration
  - c. Abdominal paracentesis
  - d. Arthrocentesis
  - e. LP
  - f. Femoral nerve Block

**Number of Candidates per course**

24-32 Maximum

**Number of working stations** : four

# PROGRAM

## Day 1

0800	Registration & Faculty meeting	
0830	Introduction (course outlines, regulations)	
0945	Basics of US (Physics made easy)	
0915	Knobology	Lecture
0945	Equipment Familiarization	Hands on Practice
1015	FAST	Lecture
1045	Coffee Break	
1100	FAST	Hands-on Practice
1230	Image Quiz	Workshop
1300	Lunch	
1400	Echocardiography	Lecture
1430	Echocardiography	Hands-on practice
1600	Echo video and picture quiz	workshop
1630	Assessment of Day 1	
1645	End of ay 1 and Faculty meeting	

## Day 2

0830	Summary of day 1 and questions	
0900	First Trimester	Lecture
0920	Principles of Vascular Doppler	Lecture
0940	AAA Lecture	Lecture
1000	Abdominal Aorta Visualization& measurement	Practice
10:30	Break	
10:45	Image Quiz	
1100	Abdominal US (Kidneys, Bladder, Gall Bladder, Liver)	Lecture
1120	Abdominal US	Practice
1200	Image quiz	
1230	Other uses of US (Chest/fracture/ Ocular)	
1300	Lunch	
1345	Procedure guided US	Lecture
1415	Central venous access	Hands-on Practice
1445	Femoral nerve Block	Hands-on Practice
1515	LP	Hands-on Practice
1545	Course Summary	
1500	Course evaluation	
1515	Post Course MCQ's	
1615	Results and certificates	

