

Sonography Training Solutions

Reg. No. 2012/076367/07 VAT. No. 9011844223



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SASUOG APPROVED BASIC FETAL ANATOMY ULTRASOUND SHORT COURSE (Level 2)

OFFERED IN COLLABORATION WITH IMPILO MEDICAL SYSTEMS



A. RATIONALE FOR THE SHORT LEARNING PROGRAMME

Ultrasound is highly operator dependent and requires the development of high order skills in order produce and interpret the image. There is a lack of health workers with the necessary skills to provide a safe and meaningful ultrasound service in both the Public and Private sectors. Often health care providers are required to operate ultrasound equipment and comment on images without formal training. Ultrasound is a cost effective means of screening for a wide range of disorders thus helping improve patient management, especially in Primary Health Care, where it is particularly useful in the assessment of the non-pregnant and pregnant patient including fetal well-being.

B. OBJECTIVES

The purpose of this course will be achieved by providing participants with the knowledge and skills to:

- Produce quality ultrasound images
- Recognise the normal ultrasound appearances of the developing fetus
- Recognise artefacts which may lead to misdiagnosis
- Operate equipment and perform scanning protocols in a manner which will maintain the health and wellbeing of the patient

C. PRE-REQUISITES/ENTRANCE CRITERIA

Holders of a relevant health/medical qualification commensurate with an ultrasound qualification in Obstetrics. These could include Obstetricians, Medical Officers, General Practitioners, Midwives and Radiographers.

D. COURSE DURATION

One contact sessions over 2½ days

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E. COURSE CONTENT

MODULE	CONTENT
ULTRASOUND PHYSICS	
Nature of sound	<ul style="list-style-type: none"> • Propagation of sound • Velocity of sound
Interactions of ultrasound with tissue	<ul style="list-style-type: none"> • Factors of attenuation • Resolution
Transducers	<ul style="list-style-type: none"> • Design • Frequency • Multi-frequency
Controls	<ul style="list-style-type: none"> • Power • TGC • Overall gain • Focus • Depth • Zoom • Sector width • Dynamic range
Image production	<ul style="list-style-type: none"> • Pulse echo system • Display modes • Artefacts
Ultrasound safety & ethical considerations	<ul style="list-style-type: none"> • Thermal effects • Mechanical effects
Introduction to US	<ul style="list-style-type: none"> • Terminology • Transducer movements & orientation • Scanning planes
OBSTETRIC ULTRASOUND	
Pelvic scanning protocol T/A	<ul style="list-style-type: none"> • Patient preparation • Scanning technique • Normal ultrasound appearances
Limited interpretation of abnormal	<ul style="list-style-type: none"> • Cervix, uterus, myometrium, endometrium, tubes, adnexae and ovaries
1 st Trimester	<ul style="list-style-type: none"> • Embryogenesis • Pregnancy dating/baseline scan <ul style="list-style-type: none"> ○ Indications for scanning ○ 1st trimester biometry & assessment ○ US signs of 1st trimester pregnancy failure ○ Complications of the 1st trimester
2 nd Trimester	<ul style="list-style-type: none"> • 2nd trimester baseline scan <ul style="list-style-type: none"> ○ Indications & need for referral ○ Confirmation of intrauterine pregnancy ○ Assessment of fetal viability, lie & presentation ○ 2nd trimester biometry ○ Recognition of normal fetal anatomy • Placental localization & evaluation • Amniotic fluid volume assessment • Multiple gestations <ul style="list-style-type: none"> ○ Chorionicity, Inter-twin membrane, Twin peak & T signs • US signs of fetal demise (2nd - 3rd trimesters)
Practical demonstration and application of theory	<ul style="list-style-type: none"> • Practical monitoring during clinical sessions • Distance monitoring of portfolios for delegates who wish to be assessed as competent (refer to section "G" below)
CEU's : 16 Level 1 & 2 Ethics	

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F. PROGRAMME

DATE	TIME	ACTIVITY	PRESENTER
Friday	12:15 – 12:45	Registration & light lunch	
	12:45 – 15:00	Introduction to ultrasound terminology & orientation Physics	Sue Olsson
	15:00 – 15:15	Tea	
	15:15 – 16:30	Pelvis First trimester scanning protocol	Sue Olsson
	Saturday	08:30 – 10:30	Obstetrics
	10:30 – 10:45	Tea	
	10:45 – 13:00	Obstetrics	Barbara van Dyk
	13:00 – 13:45	Lunch	
	13:45 – 14:45	Practical 1	Sonographers
	14:45 – 15:15	Tea	
	15:15 - 16:30	Practical 2	Sonographers
Sunday	08:30 – 10:30	Practical 3	Sonographers
	10:30 – 11:00	Tea	
	11:00 – 13:00	Practical 4	Sonographers
	13:00 – 13:45	Lunch	
	14:00 – 16:00	Practical 5	Sonographers

G. ASSESSMENT

- One (1) summative assessment (a written examination)
- One (1) formal clinical assessment
- Completion of logbook

Competency assessment is optional and will be accommodated at an additional fee of R1000 per delegate. Kindly contact the STs facilitators directly should you wish to pursue this route.

H. CERTIFICATION AND ACREDITATION

- The short course carries SASUOG approval and has been CPD accredited.
- A **Certificate of Attendance**, carrying 16 Level 1 and 2 Ethics CEU's, will be issued on completion of the contact session.
- An additional **Certificate of Competence** will be issued for delegates who complete this route.
- **A further 12 CEU's will be awarded once competence has been proved.**