



CORPORATE AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Obstetric Ultrasound in Practice				
Module Code	UZYS PJ-30-M	Level	M	Version	1
Owning Faculty	Health and Life Sciences	Field	Allied Health Professions		
Contributes towards	MSc In Medical Ultrasound				
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Professional Practice
Pre-requisites			Co- requisites	Ultrasound Technology UZYS PQ-30-M	
Excluded Combinations	None		Module Entry requirements		
Valid From	Jan 2014		Valid to	Aug 2020	

CAP Approval Date	09/07/2013
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Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> • Apply theoretical knowledge to the practice of Obstetric Ultrasound. (Component A and Component B) • Utilise relevant knowledge of anatomy, physiology and pathology of the relevant organ systems to solve complex problems. (Component A and Component B) • Demonstrate a critical knowledge of the legal, ethical and organisational aspects of current ultrasound practice in Obstetric Ultrasound. (Component B) • Critically evaluate contemporary research concerning the aetiology and management of pathologies affecting organ systems in order to inform practice, and implement new approaches where appropriate. (Component A and Component B) • Critically evaluate the contribution that obstetric ultrasound makes, compared to other diagnostic tests/procedures, in order to derive a differential diagnosis. (Component A and Component B) • Perform a comprehensive range of obstetric ultrasound procedures both skilfully and safely, demonstrating the skills required of a competent practitioner, and an ability to adapt effectively to new or unusual situations. (Component A) • Justify the contribution of the role of obstetric ultrasound to the overall management of the patient. (Component B) • Make evaluative judgements on the outcomes of ultrasound examination and report the findings accordingly. (Component A) • Make an active contribution within a multidisciplinary professional community by reflecting upon one's own practice and the practice of others. (Component B) • Engage in effective communication with clients, their families and healthcare professionals, and make appropriate referrals as required. (Component A)

Syllabus Outline	<p>General contents</p> <p>Applied anatomy, physiology and pathology related to the female reproductive system, menstrual cycle Embryological/fetal development, including abnormal fetal anatomy/developmental conditions; Interpretation of biochemical, genetic, and other invasive or non-invasive screening/diagnostic tests, Issues relating to the holistic preparation and care of the patient; Role of ultrasound in the overall management of the patient;</p> <p>Range of ultrasound techniques for external and intra-cavity procedures; including Trans vaginal scanning, Trans abdominal scanning, Doppler studies (e.g. uterine, fetal umbilical, middle cerebral arteries) and Complementary and/or alternative imaging techniques;</p> <p>Obstetric ultrasound Role of ultrasound in the 1st, 2nd and 3rd trimester, and post-natally, to include:</p> <p>First Trimester Dating scans; Downs Screening & anomaly scanning in the first trimester; Early pregnancy assessment clinics to include detection of early pregnancy loss, fetal biometry; multiple pregnancy e.g. chorionicity, amnionicity.</p> <p>Second Trimester Routine anomaly screening: fetal biometry; fetal echocardiography; placenta & umbilical cord; amniotic fluid volume; the 'late booker'.</p> <p>Third Trimester Maternal complications in pregnancy, assessment of fetal wellbeing; fetal growth trends, multiple pregnancy complications, fetal Doppler Placental assessment, Amniotic fluid assessment.</p> <p>Post-partum Post partum complications e.g. detection of retained products of conception.</p> <p>Legal , Ethical and Professional issues relating to Obstetric Ultrasound practice: Professionalism and professionalisation, codes of conduct, occupational standards, departmental protocols, continuing professional development, clinical governance, Work related upper limb disorders. Ergonomics, Contemporary research and developments in ultrasound. Safety guidelines,</p> <p>Communication Skills Importance of effective communication, listening skills, verbal/non verbal communication and self-awareness, Breaking bad news</p> <p>Reporting of Ultrasound Images: Principles of verbal and written reporting, approaches to decision making, record keeping, examination-specific report writing; Interpretation and recording of examination data; protocols and legislation; Influences of information technology on database development and use of information</p>
Contact Hours	<p>Contact time may include any of the following activities:</p> <p>Lectures; class discussions; tutorials, synchronous on-line discussion boards; seminars; clinical placement visits; medical museum visit; laboratory hands-on clinical practice using a simulator and real-life models; VLE using e-Blackboard.</p> <p>Lectures will be provided by the Course Team and by external clinical specialists. Classroom sessions will also include hands-on scanning supervised sessions and review of cases. Discussion groups will be organised covering a range of relevant topics</p>

Teaching and Learning Methods	<p>Scheduled learning constitutes 112 hours of the overall module total, and includes lectures, seminars, tutorials, demonstrations, practical classes and workshops; external visits; work based learning; supervised practise time in scanning room.</p> <p>Independent learning includes a minimum of 188 hours engaged with activities such as essential reading, case study preparation, assignment preparation and completion, computer assisted learning; simulator scanning, reflection on learning.</p> <p>Placement learning: clinical practice placements are negotiated and organised by the student, but should include a minimum of 15 hours a week of supervised scanning for the duration of the module.</p>
Reading Strategy	<p><u>Access and Skills</u> All students will be encouraged to make full use of the print and electronic resources available to them through membership of the University. These include a range of electronic journals and a wide variety of resources available through web sites and information gateways. The University Library's web pages provide access to subject relevant resources and services, and to the library catalogue. Many resources can be accessed remotely. Students will be presented with opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively. Additional support is available through the <i>iSkillZone</i> available via the Library web pages. This includes interactive tutorials on search skills and on the use of specific electronic library resources. Sign up workshops are also offered by the Library.</p> <p><u>Essential Reading</u> Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be expected to purchase a set text, be given a print study pack or be referred to texts that are available electronically.</p> <p><u>Further Reading</u> Further reading will be required to supplement the set textbook and other printed readings. The purpose of this further reading is to ensure students are familiar with current research, classic works and material specific to their interests from the academic literature. Students are also expected to identify further material for themselves using:-</p> <p>The Library Catalogue via the Library Search - Databases such as</p> <ul style="list-style-type: none"> • Cochrane Library • Cinahl • Medline • Amed • Assia • Embase • PsycInfo <p>Web sites such as:- www.bmus.org www.bma.org.uk http://www.legislation.gov.uk/ www.legislation.hmsso.gov.uk http://www.evidence.nhs.uk/ www.ob-ultrasound.net/</p>
Indicative Reading List	<p>Essential</p> <p>Callen, P, (2008). <i>Ultrasonography in Obstetrics and Gynecology</i>. 5th ed. Philadelphia: Saunders.</p> <p>Chudleigh, T and Thilaganathan, B. (2004). <i>Obstetric Ultrasound. How, Why and When</i>.</p>

Edinburgh: Elsevier.

Paladini, D, Volpe, P (2013). *Ultrasound of congenital fetal anomalies: differential diagnosis and prognostic indicators*. [online]. IN PRINT DUE AUGUST 2013. London: Informa Healthcare

Twining, P., McHugo, J.M. and Pilling, W, D. (2000). *Textbook of fetal abnormalities* Edinburgh: Churchill Livingstone.

Recommended

Baker, P.N. and Kenny, L, C. (2011). *Obstetrics by Ten Teachers*. 19th ed. London: Arnold.

Bisset, R. A. L (2002). *Differential diagnosis in obstetric and gynaecologic ultrasound* 2nd ed. London: Saunders

Carrera J, Chervanek, F,A and Kurjak A.(2003) *Controversies in Perinatal Medicine: the Fetus as a Patient*. New York Parthenon Publishing. Group.

Carrera, J, Mandruzzato, G.Pand Meada K. (2001). *Ultrasound and fetal growth*. London, Parthenon Publishing Group.

Dewbury, K., Meire, H, Cosgrove, D. (2001) *Ultrasound in Obstetrics and Gynaecology*. 2nd ed. London: Churchill Livingstone.

Entezami, M., (2003) *Ultrasound diagnosis of fetal anomalies*. New York Georg Thieme Verlag.

Gabbe, L, Niebyl, J, Simpson, J. (2007) *Obstetrics: Normal and Problem pregnancies* 5th ed Churchill Livingstone

Henley, A., Kohner, N (2001) *When A Baby Dies: The Experience of Late Miscarriage, Stillbirth and Neonatal Death* London Routledge

Johnson, P and Kurtz, A (2001) *Case review Obstetric and Gynecologic Ultrasound*: St. Louis: Mosby.

Lees, C., (2003) *Making sense of obstetric Doppler ultrasound: a hands-on guide*, London: Arnold.

Merz, E., ed, (1998) *3-D Ultrasound in Obstetrics and Gynecology*. Philadelphia: Lippincot Williams and Wilkins

Ola-Ojo, O. O., (2005) *Obstetrics and gynaecology ultrasound : a self-assessment guide* . London: Elsevier Churchill Livingstone

Scott, R., (2002) *Rights, duties and the body : law and ethics of the maternal-fetal conflict* Oxford Hart Publishing

Smith, N., C. and Smith, P., M. (2006) *Obstetric ultrasound made easy*. rev.ed. Edinburgh: Churchill Livingstone.

Thilaganthan, B, Sairam, S, Papageorghiou A,T, Bhide A (2007) *Problem based Obstetric Ultrasound (series in Maternal Fetal Medicine)* London: Informa UK Ltd

UKAS, (2008). *Guidelines for Professional Working Standards: Ultrasound Practice*. [online] [Accessed 27 March 2013].

	<p>Journals</p> <p>British Journal of Radiology BMUS ultrasound British Journal of Obstetrics and Gynaecology British Journal of Midwifery Journal of Clinical Ultrasound Journal of Diagnostic Medical Sonography Midwifery Prenatal Diagnosis Ultrasound in Obstetrics and Gynaecology Ultrasound Quarterly European Journal of Ultrasound Journal of ultrasound in Medicine and Biology British Medical Journal Seminars in Ultrasound, CT and MRI</p> <p>Web Sites</p> <p>www.aium.org www.ardms.org www.sdms.org www.sonoworld.com www.bma.org.uk www.homeoffice.gov.uk www.cfoi.org.uk www.legislation.hmsso.gov.uk/ www.bmj.bmjournals.com www.tinytickers.org.uk www.sor.org.uk www.nelh.nhs.uk www.rcog.org.uk www.fetalanomaly.screening.nhs.uk www.auntminnie.com www.ob-ultrasound.net www.fetalsono.com www.evidence.nhs.uk/ www.uk-sands.org www.arc-uk.org</p>
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Part 3: Assessment	
Assessment Strategy	<p>A wide range of assessment strategies are employed to ensure that the postgraduate student has acquired the knowledge and understanding, as well as the intellectual, practical and transferable skills for this Programme. The details of the assessments feature in the relevant module handbooks. The assessment strategy of this Programme will thus seek to reflect the learning outcomes of each module.</p> <p>Assessment for the module incorporates both clinical and academic processes i.e. both cognitive ability and professional competence are assessed (at level M).</p> <p>Component A-: Practice based assessments to include production of portfolio</p> <p>The practice-based assessment consists of a production of a Clinical Portfolio of evidence</p> <p>This portfolio is comprised of</p> <ul style="list-style-type: none"> • Memorandum of Understanding

	<ul style="list-style-type: none"> • Placement Progress Report (one per month) • Record of clinical experience (<i>minimum number of 100 cases in each area displaying a range of various examinations and pathology</i>) • Evidence of CPD with reflective accounts • Example anonymised reports with images • 2 x 1000 word case studies which demonstrates the current use of ultrasound as a diagnostic tool within the area of specialism • 4 summative clinical assessments • Departmental scanning protocols <p>The practice-based assessment is marked as a PASS/FAIL. All elements are equally weighted. Further details are in the clinical portfolio handbook.</p> <p>Component B: Written Assignment</p> <p>Consists of a 3000 word written assignment on a subject relating to the area of specialty being studied. Further details are in the module handbook.</p>
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Identify final assessment component and element	Component A	
% weighting between components A and B (Standard modules only)	A:	B:
First Sit		
Component A (controlled conditions)	Element weighting	
Practice based assessments to include production of portfolio	Pass/Fail	
Component B	Element weighting	
Description of each element		
3000 word assignment	100%	

Resit (further attendance at taught classes is not required)		
Component A (controlled conditions)	Element weighting	
Description of each element		
Practice based assessments to include production of portfolio	Pass/Fail	
Component B	Element weighting	
Description of each element		
3000 word assignment	100%	

If a student is permitted an **EXCEPTIONAL RETAKE** of the module the assessment will be that indicated by the Module Description at the time that retake commences.