

Module Specification

Module Summary Information

1	Module Title	Obstetric and Gynaecological Ultrasound 2
2	Module Credits	40
3	Module Level	6
4	Module Code	RAD6060

5	Module Overview
<p>Rationale</p> <p>This module aims to prepare you for a career in medical ultrasound, where they are continually seeking to improve themselves, the patient experience and their own diagnostic expertise. This module will build upon the theoretical and clinical skills in obstetric and gynaecological ultrasound that you developed at levels four and five, in order to facilitate and support your capability to become a competent ultrasound practitioner.</p> <p>This module supports you in achieving the commensurate skills and knowledge necessary to competently complete an ultrasound examination in obstetrics and gynaecology, of a level 6 student. The aim of the module is to use experiential learning within the clinical placement as a foundation for safe and ethical ultrasound practice.</p> <p>Alignment with Programme Philosophy and Aims</p> <p>This module has clinical and academic components and builds upon the knowledge acquired in Years 1 and 2. This Module aims to provide you with a thorough knowledge of obstetric and gynaecological pathology and apply this in relation to the ultrasound appearances in the fetus and female reproductive organs.</p> <p>It enables you to progress to the more advanced ultrasound techniques. The syllabus includes; detailed fetal cardiac views in anomaly ultrasound, transvaginal scanning in the first and third trimester, early pregnancy ultrasound and the full range of gynaecological ultrasound examinations including post-menopausal referrals and management of complex ovarian masses.</p> <p>You will be supported in developing your practical ultrasound skills in more advanced areas of ultrasound, and adapting your technique in examining complex referrals, including clinically unwell or technically challenging patients. You will be encouraged in developing the necessary communication skills required to report complex pathology or unexpected findings in gynaecology.</p> <p>We are aware that delivering news regarding fetal abnormality or demise is a challenging and emotive task for the qualified sonographer. This module will endeavour to support your further developing of these critical communication skills. A qualified sonographer is also required to communicate ultrasound findings to peers, midwives, clinicians auxiliary staff, patients and carers and present cases at clinical multidisciplinary team (MDT) meetings. This module progresses you further on your journey into this professional multidisciplinary skill set for patients undergoing obstetric and gynaecological ultrasound. The module will include development of your understanding of the diverse cultures from which your patients will come, within the context of worldwide patient care.</p> <p>This module supports you in achieving the skills and knowledge necessary to competently complete an ultrasound examination in obstetrics and gynaecology, commensurate of a level 6 student.</p>	

Learning and Teaching Strategy

This module will comprise of a number of approaches to learning.

Keynote lectures will provide you with an overview of the anatomy and physiology of the female reproductive and fetal development systems, this knowledge will then be applied to ultrasound practice using case based workshops and real life scenarios using theory workshops and practical sessions on the ultrasound simulator.

You will be supported in developing your practical ultrasound skills in the clinical department, and by working through the personalised learning practical ultrasound assessments in obstetric and gynaecological available on the ultrasound simulator. The use of the simulator allows you to develop your skills at your own pace, and encourages personalised reflection and supports tutor feedback through analysis of activity completed.

Emphasis will be on your use of online resources provided via Moodle to prepare for workshops, seminar groups and small group tutorials. This module also makes use of e-learning resources and activities including; Public Health England – NHS Fetal Anomaly Screening Programme, Health Education England- e-Learning for Healthcare (e-LfH) e-learning project. These government resources have been developed with a range of professional bodies and their use will enhance your learning, support the teaching methods on the Module and provide a valuable reference point for you, encouraging you to become a lifelong learner.

Seminar groups will provide you with the opportunity to consider real life scenarios and cases studies, where peer feedback will be facilitated.

Examples of tasks you will undertake in this module include:

- Apply your knowledge of anatomy and physiology of the fetus to the obstetric ultrasound examination in normal and abnormal clinical presentations.
- Apply your knowledge of anatomy and physiology of the female reproductive organs to the gynaecological ultrasound examination in normal and abnormal clinical presentations.
- Apply the skills required to evaluate the medico-legality of an ultrasound examination request for a gynaecological and obstetric ultrasound examinations.
- Consolidate the communication skills required to obtain informed consent from the patient and construct an appropriate report and communicate its contents where appropriate, clearly both orally and in writing to specialist and non-specialist audiences for : an abnormal gynaecological ultrasound examination, an incidence of fetal abnormality, adverse outcome or demise. Beginning of life issues and breaking bad news are also included.
- Where appropriate, recommend further imaging and or clinical referral to assist in Patient management.
- Demonstrate competence in obstetric and gynaecological ultrasound and a self-awareness of scope of practice and limitation of practice, seeking support where necessary.
- Critically evaluate the role of ultrasound in the diagnosis and management of gynaecological pathologies and conditions, termination of Pregnancy; breaking bad news; normal variants; ectopic pregnancy; and relate theory to practice in the clinical setting.

Assessment Strategy You will be required to complete a Clinical portfolio and a summative invigilated assessment which includes workstations.

Clinical Portfolio (level 6)

As part of your clinical portfolio there will be evidence of formative learning, a summative Viva Voce and a summative clinical assessment.

The formative learning includes your personal reflections, formative clinical competencies, and a formative clinical assessment.

To meet the requirements of Consortium for the Accreditation of Sonographic Education (CASE), (2015) you will complete a summative Viva, undertaken by an independent assessor (who has not been involved with your clinical training).

The summative clinical assessment includes specified ultrasound examinations completed in the clinical department, the forms for which have been designed using recommendations from (CASE) (2015), the Society and College of Radiographers (SCoR) and British Medical Ultrasound Society (BMUS), Guidelines for Professional Ultrasound Practice (2015). Details of the summative clinical assessment are available in the Clinical Placement Handbook (Level 6).

Summative invigilated assessment.

This is a 1 ½ hour invigilated assessment which will include questions using ultrasound images and scenarios and critical evaluation regarding the role of ultrasound in diagnosis and management of obstetrics and gynaecology.

6	Indicative Content
	Transvaginal scanning technique Early Pregnancy and embryology Early pregnancy complications- workshop Communication in a failing pregnancy First trimester ultrasound screening including Nuchal translucency, absent nasal bone and ductus venosus Nuchal Translucency Audit Second trimester screening: cranium and spine. Second trimester screening: the fetal heart Second trimester screening: the fetal chest diaphragm abdomen Second trimester screening: the fetal urinary tract Second trimester screening: the fetal limbs and skeletal system Second trimester screening: the fetal face Transvaginal scanning in the second and third trimester. Cervical length and placental localisation. Post-partum ultrasound Gynaecological ultrasound: anatomy physiology and ultrasound appearances. Gynaecological ultrasound: Ethical and medico-legal issues; Hygiene Gynaecological ultrasound: Ultrasound protocols and technique Audit of Gynaecological ultrasound reports Gynaecological ultrasound: Pathology of uterus, cervix and ovaries – ultrasound appearances Gynaecological ultrasound: RCOG Guidelines on management of ovarian masses Gynaecological ultrasound: Other pelvic pathology. Intra-uterine devices Formative Invigilated Assessment Formative Invigilated Assessment Review

Gynaecological ultrasound:
The acute gynaecological examination
Gynaecological ultrasound: Population screening.
Doppler ultrasound
Gynaecological ultrasound: Fertility investigations

7		Module Learning Outcomes
		On successful completion of the module, students will be able to:
	1	Apply a detailed understanding of obstetrics, fetal anatomy, female physiology and gynaecology to the clinical setting.
	2	Evaluate the medico-legality of an ultrasound examination request for a full range of obstetric and gynaecological examinations, obtain informed consent from the patient and using safe scanning practices, autonomously complete an ultrasound examination commensurate with a level 6 student.
	3	Communicate for the full range of obstetric and gynaecological ultrasound examinations, results both orally and in written reports using audience appropriate terminology, including recommendations regarding patient management where appropriate.
	4	Critically evaluate the role of ultrasound and relate theory to practice in the clinical setting, in order to contribute to patient or fetal diagnosis, management and service delivery, in a range of diseases affecting the female reproductive organs, and abnormalities affecting the developing fetus.

8		Module Assessment		
Learning Outcome				
	Coursework	Exam	In-Person	
1-3			X	
4		X		

9		Breakdown Learning and Teaching Activities
Learning Activities	Hours	
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	45	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	45	
Private Study (PS) includes preparation for exams	310	
Total Study Hours:	400 *Total hours of placement at L6 510 hours	