

Module Specification

Module Summary Information

1	Module Title	Obstetrics for Ultrasound Practice
2	Module Credits	40
3	Module Level	4
4	Module Code	RAD4043

5	Module Overview
<p>Rationale</p> <p>This module lays the foundation for obstetric ultrasound imaging and covers the basic principles of obstetrics; embryology and normal anatomy and physiology. Effective and safe clinical practice in medical ultrasound requires the practitioner sonographer to draw on their professional knowledge and understanding of human anatomy and physiology as well as that of the developing fetus.</p> <p>In the clinical setting you will be required to make judgments regarding the sonographic appearance of the female reproductive organs and vessels, and of the developing fetus in utero. Your decision making will be based on sound theoretical understanding on the function and morphology of the fetus as well as the female reproductive organs. 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 will begin by providing you with a sound foundation for further academic and clinical studies into human biology throughout the course. You will be taught the conventions of terminology and description used in the study of anatomy and will be provided with opportunities to apply this knowledge within your clinical placements. You will develop an understanding of the function of the reproductive organs within the pelvis with particular focus on the applied physiology of the menstrual cycle and fetal development.</p> <p>A qualified sonographer is 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 starts you on your journey into this professional multidisciplinary skill set. This module will include development of your understanding of the diverse cultures from which your patients will come, within the context of worldwide patient care. This module will also provide you with the opportunity to develop your core personal presentation skills, as well as your digital software programme presentation skills.</p> <p>Learning and Teaching Strategy</p> <p>This module will comprise of a number of approaches to learning. Keynote lectures will provide instruction in the theory and practice of ultrasound imaging of the female reproductive organs and vessels, and of the developing fetus in utero. This knowledge will then be applied to ultrasound practice using case based workshops and real life scenarios. Your studies will commence with ensuring you are familiar with core aspects of medical terms used within the clinical setting in order to enable you to interact effectively within the clinical setting. You will</p>	

also learn the ultrasound appearances of normal pelvic and fetal anatomy together with ultrasound techniques for imaging these areas.

Workbook activities will support your systematic learning, with emphasis 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:

- Employ your developing understanding of the female reproductive system to routine ultrasound practice
- Investigate the embryology and fetal development via interaction with a variety of learning resources including medical images, skills simulators and anatomical models
- Explore case studies relating to disordered anatomy and physiology within the context of pathology and fetal abnormalities that may be detected using ultrasound examination.
- Gain competence within your developing role as a clinical sonographer
- Develop your personal presentation, and digital presentation software program skills.
- Describe the patient journey of the pregnant woman including the role of obstetric ultrasound in this journey

Students will undertake 200 hours of study within this module, which will include a minimum of 30 hours contact time at the university

Assessment Strategy

There will be practical clinical competencies completed in the clinical department to support your clinical practice, as well as a 10 minute presentation where you will be able to explain the role of obstetric ultrasound in the patient journey of the pregnant woman.

6	Indicative Content
	Overview of embryology and fetal development. U/S terminology, scan planes and orientation relating to the pregnant and non-pregnant pelvis. U/S terminology, scan planes and orientation relating to the pregnant and non-pregnant pelvis. Overview of the patient journey for the pregnant woman. The patient journey and multidisciplinary roles in ANC. The first trimester- screening and consent. Overview of obstetric ultrasound and importance of effective communication. Normal early pregnancy and the non-pregnant uterus- related to ultrasound appearances. The first trimester dating examination. Ultrasound technique and appearances. Normal fetal anatomy in the first trimester. The first trimester dating examination.

Ultrasound technique and appearances.

Crown rump length.

The second trimester rationale for 11 auditable conditions- normal US appearances.

Normal fetal anatomy in the second trimester.

Personal presentation, and digital presentation software program skills session.

Fetal measurements (HC AC FL workshop) Stomach and bladder.

The third trimester examination Ultrasound technique and appearances. (inc fetal lie and identifying placenta).

The third trimester examination Ultrasound technique and appearances. (inc fetal lie and identifying placenta).

7		Module Learning Outcomes
On successful completion of the module, students will be able to:		
1	Demonstrate safe and effective clinical and communication skills, including obstetric ultrasound technique, commensurate with the expected competency level of a level 4 student sonographer.	
2	Explain the role of obstetric ultrasound in the patient journey of the pregnant woman.	
3	Develop your personal presentation, and digital presentation software program skills.	

8		Module Assessment		
Learning Outcome		Coursework	Exam	In-Person
1,2,3				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	50	
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	40	
Private Study (PS) includes preparation for exams	310	
Total Study Hours:	400	*Total hours of placement at L4, 578 hours