

# **ACADEMIC SERVICES**

## **MODULE SPECIFICATION**

| Part 1: Basic Data  |   |                       |                |                                      |                     |      |
|---------------------|---|-----------------------|----------------|--------------------------------------|---------------------|------|
| Module Title        | Negotiated Specialist Ultrasound Practice 3                 |                       |                |                                      |                     |      |
| Module Code         | UZYSPM-15-M   |                       | Level          | M                                    | Version             | 2    |
| Owning Faculty      | Health & Life Sciences                                      |                       | Field          | Allied Health Professions            |                     |      |
| Contributes towards | MSc In Medical Ultrasound                                   |                       |                |                                      |                     |      |
| UWE Credit Rating   | 15  | ECTS Credit<br>Rating | 7.5            | Module<br>Type                       | Profession Practice | onal |
| Pre-requisites      | None  |                       | Co- requisites | Ultrasound Technology<br>UZYSPQ-30-M |                     |      |
| Excluded            | None  |                       | Module Entry   | The ability to study at M level      |                     |      |
| Combinations        |   |                       | requirements   |                                      |                     |      |
| Valid From          | Jan 2014 v1<br>September 2018 v2 (current<br>students only) |                       | Valid to       |                                      |                     |      |

| CAP Approval Date | 09/07/2013 |  |
|-------------------|------------|--|
|                   |            |  |

| Part 2: Learning and Teaching |  |  |  |
|-------------------------------|--|--|--|
|                               |  |  |  |
| Learning<br>Outcomes          | On successful completion of this module students will be able to:  |  |  |
|                               | <ul> <li>Apply theoretical knowledge to the practice of medical ultrasound within the area of<br/>chosen specialty. (Component A &amp; B)</li> </ul>   |  |  |
|                               | <ul> <li>Utilise relevant knowledge of anatomy, physiology and pathology to solve complex<br/>problems. (Component A &amp; B)</li> </ul>   |  |  |
|                               | <ul> <li>Demonstrate a critical knowledge of the legal, ethical and organisational aspects of<br/>current ultrasound practice in the chosen area of ultrasound specialty. (Component<br/>A &amp; B)</li> </ul>   |  |  |
|                               | <ul> <li>Critically evaluate contemporary research concerning the aetiology and<br/>management of a range of pathologies in order to inform practice, and implement<br/>new approaches where appropriate. (Component B)</li> </ul>   |  |  |
|                               | <ul> <li>Critically evaluate the contribution that ultrasound makes, compared to other<br/>diagnostic tests/procedures, in order to derive a differential diagnosis. (Component<br/>B)</li> </ul>  |  |  |
|                               | <ul> <li>Perform a comprehensive range of medical ultrasound procedures within the<br/>chosen area of ultrasound specialty, both skilfully and safely, demonstrating the<br/>skills required of a competent practitioner, and an ability to adapt effectively to new<br/>or unusual situations. (Component A &amp; B)</li> </ul> |  |  |
|                               | <ul> <li>Justify the contribution of the role of medical ultrasound to the overall management<br/>of the patient. (Component A &amp; B)</li> </ul>   |  |  |
|                               | <ul> <li>Make evaluative judgements on the outcomes of ultrasound examination and report<br/>the findings accordingly. (Component A &amp; B)</li> </ul>  |  |  |
|                               | <ul> <li>Make an active contribution within a multidisciplinary professional community by<br/>reflecting upon one's own practice and the practice of others. (Component A &amp; B)</li> </ul>  |  |  |

• Engage in effective communication with clients, their families and healthcare professionals, and make appropriate referrals as required. (Component A & B)

### Syllabus Outline

Potential areas for student study must be negotiated with the Module Leader, and could include subspecialty of areas such as the following

#### **Obstetric Ultrasound**

First-trimester anomaly scanning Fetal echocardiography

#### **Gynaecological Ultrasound**

Fertility and sub-fertility scanning Screening for ovarian cancer

#### **General Medical Ultrasound**

Paediatric
Musculo-skeletal
Superficial parts e.g. breast ultrasound

#### Vascular Ultrasound

Upper limb assessment

The content of the module will be defined following discussions between the module leader, the student and the work-based manager, and will result in a Learning Contract being drawn up. This contract will specify exactly how the module learning outcomes will be achieved. Clinical assessment areas will also be defined as a result of discussions, and subject specific competencies must be demonstrated in all areas.

#### Subject specific topics

Normal anatomy & physiology; normal variants; normal ultrasound appearances; pathological processes; abnormal ultrasound appearances; scanning techniques; use in health screening; subject specific variations

#### Legal and Ethical issues

General legal & ethical principles relating to the ultrasound practice of the area of subject specialty

# Professional and employment issues relating to the area of Negotiated Specialist Ultrasound practice:

These subjects will be covered as joint learning sessions with students studying other specialty areas, and will include professionalism and professionalisation, codes of conduct, occupational standards, departmental protocols, continuing professional development, clinical governance, Work related upper limb disorders.

Ergonomics

#### **Communication Skills:**

Importance of effective communication, listening skills, verbal/non verbal communication and self-awareness.

#### **Reporting of Ultrasound Images:**

Principles of verbal and written reporting, approaches to decision making, record keeping Influences of information technology on database development and use of information

#### **Action Learning**

Action learning sets and research, quality improvement initiatives, exploring strategies for monitoring and evaluation, reflective practice.

The content of this module includes a variety of elements linked to studying within an action learning group:

#### **Group Working**

Group building and team dynamics (theories of collaboration), interprofessional working, power and decision-making, role boundaries, ground rules.

#### **Project Management Skills**

Contract learning, negotiation, time management and management of change, problem solving.

#### **Enquiry Based Learning**

Enquiry Based Learning involves working in small groups with a facilitator and uses triggers to provide the starting point for discussion and the acquisition of knowledge

#### Contact Hours

Contact time may include any of the following activities:

Lectures; class discussions; 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.

Lectures will be provided by the Course Team and by external visiting 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.

# Teaching and Learning Methods

**Scheduled learning** constitutes a minimum of 28 hours but will vary according to the subject specialty chosen to study. It will include lectures, seminars, tutorials, demonstrations, practical classes and workshops; external visits; work based learning; supervised practise time in scanning room.

**Independent learning** includes a minimum of 122 hours but will vary according to the subject specialty chosen to study. It will include activities such as essential reading, case study preparation, assignment preparation and completion, computer assisted learning; simulator scanning, reflection on learning.

**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.

A variety of approaches will be used which may include work-based; action and problemcentred learning; enquiry based learning; supervised clinical practice; negotiated learning contracts; facilitated learning in the work place; on-line learning; key lectures; debates; seminars; student presentations.

The student will negotiate the sub-speciality to be studied, via a learning contract, with the module leader and the work-based manager.

A learning contract will be negotiated between the student, a member of academic staff and the work based manager from which a programme of study will be agreed. This programme may include use of one or more of the following: self-directed learning; tutorials; seminars; study days; open or distance learning. The nature of the module enables the student to negotiate and learn with significant and relevant others as they see fit.

#### **Distance Learning**

Students may choose to study the module as distance learning. Access to an electronic Blackboard will be available, where students will be able to view lectures and interact with on-line discussion boards. There is no specific timetable as this will be negotiated with the module leader, and any other partner in learning that the student selects who is prepared to contribute to the learning.

# **Action Learning Sets**

Students attending timetabled sessions for this module will be allocated to an action learning set. The function of this group is to facilitate the achievement of each students individual learning outcomes. The outcomes specific to the students chosen speciality area will be negotiated as part of the learning contract. The action learning sets will provide

|                            | opportunities for students to discuss the problems they face within their clinical areas, and help each other to find solutions.  |
|----------------------------|---|
| Reading<br>Strategy        | Access and Skills 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 iSkillZone 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. |
|                            | Essential Reading 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.   |
|                            | Further Reading 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:-  |
|                            | The Library Catalogue via the Library Search - Databases such as  |
|                            | <ul> <li>Cochrane Library</li> <li>Cinahl</li> <li>Medline</li> <li>Amed</li> <li>Assia</li> <li>Embase</li> <li>PsycInfo</li> </ul>  |
|                            | The Library Catalogue - Web sites such as:- www.bmus.org www.bma.org.uk http://www.legislation.gov.uk/ www.legislation.hmso.gov.uk http://www.evidence.nhs.uk/ www.ob-ultrasound.net/   |
| Indicative<br>Reading List | Below is an example for students specialising in Gynaecology Ultrasound. Specific advice relating to appropriate and relevant reading material will be provided and tailored to the negotiated specialist area undertaken by student.   |
|                            | Bates, J. (2006) <i>Practical Gynaecological Ultrasound</i> . Cambridge: Cambridge University Press.  |
|                            | Bisset, R. A. L and Khan, A.N. (2002) <i>Differential Diagnosis in abdominal Ultrasound</i> . 2nd ed. London: Saunders.   |
|                            | Callen, P, (2008) <i>Ultrasonography In Obstetrics And Gynecology.</i> 5th ed. Philadelphia: Saunders   |
|                            | Dewbury K, Meire H, Cosgrove D, (2001) <i>Ultrasound In Obstetrics And Gynaecology</i> , Churchill Livingstone.   |

Fleischer A, T. L., Lee B., Manning D.and Romero, S. (2011) *Sonography in Obstetrics and Gynecology: Principles and Practice*.[online]. 7<sup>th</sup> ed. McGraw-Hill Medical. [Accessed 27 March 2013].

Johnson, P, and A., KURTZ, (2001) Obstetric and Gynecologic Ultrasound: Case Review St. Louis: Mosby.

Kurjack A, Fleischer A, (2003) Doppler Ultrasound in Gynecology, Parthenon Publishing.

Yee B and Rosen G. (1996) Transvaginal Sonography in Infertility, New York.

Ola-Ojo, O. O, (2004) Obstetrics and Gynaecology Ultrasound : A Self-Assessment Guide. London: Churchill Livingstone

Robboy, S.J. Anderson, M.C. and Russell, P. (2002) Robboy's *Pathology of the Female Reproductive Tract. London:* Churchill Livingstone.

Schwartz L., Olive D. and McCarthy, S. (1998) *Diagnostic Imaging for Reproductive Failure*, Parthenon Publishing.

Tindall, V. R (1991) Illustrated Textbook Of Gynaecology, Gower.

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

#### Part 3: Assessment

#### Assessment Strategy

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.

Assessment for the module incorporates both clinical and academic processes i.e. both cognitive ability and professional competence are assessed (at level M).

#### **Component A: Practice-Based Assessment**

The practice-based assessment consists of a production of a Clinical Portfolio of evidence

This portfolio is comprised of

- Memorandum of Understanding
- Student Learning Contract
- Placement Progress Report (one per month)
- Record of clinical experience (number and range of cases as agreed with module leader)
- Evidence of CPD with reflective accounts
- Example anonymised reports with images
- 1 x 1000 word case studies which demonstrates the current use of ultrasound as a diagnostic tool within the area of specialism
- 2 summative clinical assessments
- Departmental scanning protocols

The practice-based assessment is marked as a PASS/FAIL. All elements are equally weighted. Further details are in the clinical portfolio handbook.

#### **Component B: Written Assignment**

Consists of a 1500 word written assignment on a subject relating to the area of specialty being studied. Further details are in the module handbook.

| Identify final assessment component and element                  | A |           |           |
|--|---|-----------|-----------|
| % weighting between components A and B (Standard modules only)   |   |           | B:        |
| First Sit  |   |           |           |
|  |   |           |           |
| Component A (controlled conditions)  Description of each element |   | Element   | weighting |
| Practice based assessments to include production of portfolio    |   | Pass/fail |           |
|  |   |           |           |
| Component B Description of each element                          |   | Element   | weighting |
| 1500 word assignment   |   | 100%      |           |
|  |   |           |           |

| Resit (further attendance at taught classes is not required)     |                   |  |
|--|-------------------|--|
| Component A (controlled conditions)  Description of each element | Element weighting |  |
| Practice based assessments to include production of portfolio    | Pass/fail         |  |
|  |                   |  |
| Component B Description of each element                          | Element weighting |  |
| Resubmission of 1500 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.