



ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Negotiated Specialist Ultrasound Practice 1				
Module Code	UZYSK-30-M	Level	M	Version	2
Owning Faculty	Health & Life Sciences	Field	Allied Health Professions		
Contributes towards	Post Graduate Certificate in Medical Ultrasound Post Graduate Diploma in Medical Ultrasound MSc In Medical Ultrasound				
UWE Credit Rating	30	ECTS Credit Rating	15	Module Type	Professional Practice
Pre-requisites			Co- requisites	Ultrasound Technology UZYSK-30-M	
Excluded Combinations	None		Module Entry requirements		
Valid From	January 2014 v1 Sept 2018 v2 (current cohort only)		Valid to		

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 medical ultrasound (Components A & B) • Utilise relevant knowledge of anatomy, physiology and pathology of the relevant organ systems to solve complex problems (Components A & B) • Demonstrate a critical knowledge of the legal, ethical and organisational aspects of current ultrasound practice in their chosen Negotiated Specialist Ultrasound (Component B) • Critically evaluate contemporary research concerning the aetiology and management of pathologies in order to inform practice, and implement new approaches where appropriate (Components A & B) • Critically evaluate the contribution that ultrasound makes, compared to other diagnostic tests/procedures, in order to derive a differential diagnosis (Components A & B) • Perform a range of medical 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 ultrasound to the overall management of the patient (Component B) • Make evaluative judgments 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)

The principles of action learning and inquiry.

Potential areas for student study must be negotiated with the Module Leader and could include speciality areas such as the following:

- Vascular ultrasound
- Musculo-skeletal ultrasound
- Specialist Cancer Care
- Echocardiography
- Fetal Medicine
- Or other specialist areas where ultrasound is integral to diagnosis and management of the patient

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; anatomical variants; normal ultrasound appearances; pathological processes; abnormal ultrasound appearances; scanning techniques; use in health screening - subject specific variations

Role of ultrasound in the overall management of the patient.
Complementary and/or alternative imaging techniques.
Interpretation and recording of examination data.
Safety guidelines, protocols and legislation.
Contemporary research and developments in ultrasound.
Techniques related to ultrasound imaging of chosen specialist field.

Legal and Ethical Issues:

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

Professional and Employment Issues Relating to 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. Issues of confidentiality.

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

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.

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:

	<p>Group Working Group building and team dynamics (theories of collaboration), interprofessional working, power and decision-making, role boundaries, ground rules.</p> <p>Project Management Skills Contract learning, negotiation, time management and management of change, problem solving.</p> <p>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</p>
Contact Hours	<p>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.</p> <p>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.</p>
Teaching and Learning Methods	<p>Scheduled learning constitutes a maximum of 112 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.</p> <p>Independent learning includes a minimum of 188 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.</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> <p>A variety of approaches will be used which may include work-based; action and problem-centred 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.</p> <p>The student will negotiate the sub-speciality to be studied, via a learning contract, with the module leader and the work-based manager.</p> <p>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.</p> <p>Distance Learning</p> <p>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.</p> <p>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</p>

	<p>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</p>
<p>Reading Strategy</p>	<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 /SkillZone 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.</p> <p><u>Blackboard</u> This module is supported by Blackboard where students will be able to find all necessary module information. Direct links to information sources will also be provided from within Blackboard</p> <p>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>The Library Catalogue - 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>
<p>Indicative Reading List</p>	<p>Books</p> <p>Hennerici M, Neuerburg-Heusler D, (2006) Vascular Diagnosis with Ultrasound: Clinical Reference with Case Studies. 2nd Edition:, Thieme,</p> <p>McGahan J. Goldberg B (2008) Diagnostic Ultrasound. Informa Healthcare. 2nd Ed.</p> <p>Meire, Cosgrove, Dewbury, Wilde, (1992) Clinical Ultrasound, Churchill Livingstone.</p> <p>Meire H (2001) Abdominal and General Ultrasound. Churchill Livingstone</p>

Myers K, Clough A (2004) Making Sense of Vascular Ultrasound: A hands-on guide, Arnold

Parvin SD, Earnshaw JJ, (2005) Rare Vascular Disorders: A Practical Guide for the Vascular Specialist, TFM.

Pellerito J, Polak J.F, (2012) Introduction to Vascular Ultrasonography, 6th Ed, Elsevier Saunders

Rumack C (2011) Diagnostic Ultrasound Imaging, Vol 1: Mosby

Rumack, C, Wilson S. Charboneau J. (2005) Diagnostic Ultrasound. St. Louis: Mosby

Thursh A, Hartshorne T (2009) Vascular Ultrasound: How, Why and When, 3rd Ed, Churchill Livingstone

William D, Middleton MD (2007) General and Vascular Ultrasound: Case Review Series, 2nd Ed: Mosby,

Journals

Douglas, S. and Machin,T.(2004) *A model for setting up interdisciplinary collaborative working in groups: lessons from an experience of action learning. Journal of Psychiatric & Mental Health Nursing. 11(2):189-19*

Lizzio, A. and Wilson, K. (2004) *Action learning in higher Education: An investigation of its potential to develop professional capability. Studies in Higher Education 29 (4) 469 -488*

Miller, P. (2003) *Workplace learning by action learning: A practical example. Journal of Workplace Learning 15 (1) 14 -23*

Smith, P, A, C. and O'Neil, J. (2003) A review of action learning literature 1994 – 2000. *Journal of Workplace Learning 15 (4) 154 -166*

The above is an example for students specialising in Vascular Ultrasound. Specific advice relating to appropriate and relevant reading material will be provided and tailored to the negotiated specialist area undertaken by student.

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
- Learning Contract
- Placement Progress Report (one per month)
- Record of clinical experience (number and range of cases as agreed with module leader)

	<ul style="list-style-type: none"> • 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	A	
% weighting between components A and B (Standard modules only)	A:	B:
First Sit		
Component A (controlled conditions) Description of each element	Element weighting <i>(as % of component)</i>	
Practice based assessment to include the production of a portfolio	PASS/FAIL	
Component B Description of each element	Element weighting <i>(as % of component)</i>	
3000 word written assignment	100	

Resit (further attendance at taught classes is not required)		
Component A (controlled conditions) Description of each element	Element weighting <i>(as % of component)</i>	
Practice based assessment to include the production of a portfolio	PASS/FAIL	
Component B Description of each element	Element weighting <i>(as % of component)</i>	
3000 word written assignment	100	
<p>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.</p>		