



University of the  
West of England

**CORPORATE AND ACADEMIC SERVICES**

**MODULE SPECIFICATION**

Part 1: Basic Data					
Module Title	Reporting Skills in Nuclear Medicine				
Module Code	UZYSRM-15-M	Level	M	Version	1
Owning Faculty	Health and Life Sciences	Field	Allied Health Professions		
Contributes towards	CPD module				
UWE Credit Rating	15	ECTS Credit Rating	7.5	Module Type	Standard
Pre-requisites	None		Co- requisites		
Excluded Combinations	None		Module Entry requirements	Relevant Nuclear Medicine experience	
Valid From	October 2013		Valid to		

<b>CAP Approval Date</b>	16/01/2014
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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"> <li>• Apply relevant theoretical and practical knowledge of Nuclear Medicine to the reporting of images, demonstrating an ability to detect and describe normal and common pathological conditions encountered in routine clinical practice (Component A)</li> <li>• Critically evaluate image quality in relation to potential imaging artefacts (Component A)</li> <li>• Develop the clinical skills of the practitioner thus enabling description, discussion and evaluation of radionuclide imaging procedures (Component A)</li> <li>• Demonstrate a critical understanding of various imaging protocols related to Nuclear Medicine and consider how these might affect overall image quality (Component A and B)</li> <li>• Critically evaluate the implementation and provision of a Non-medical Nuclear Medicine reporting service (Component B)</li> <li>• Demonstrate a critical understanding of service efficiency and clinical audit mechanisms whilst demonstrating an awareness of current legislation / clinical governance (Component B)</li> <li>• Critically evaluate contemporary practice in nuclear medicine and other related imaging modalities in order to inform decision making processes (Component</li> </ul>

	<p>A and B)</p> <ul style="list-style-type: none"><li>• Critically evaluate the role of the reporting nuclear medicine practitioner within the context of an interprofessional environment (Component A and B)</li><li>• Utilise a formulated technical reporting framework, whilst demonstrating appreciation for the moral and ethical aspects of patient care and their subsequent treatment (Component A and B)</li></ul>
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Syllabus Outline	<p><b>Applied Anatomy</b> Applied anatomy, physiology and pathological processes will be introduced for a number of human body systems</p> <p><b>Nuclear Medicine Reporting</b> The following headings will be used to discuss the distribution and appearance of radioactive tracers used across a range of common Nuclear Medicine procedures:</p> <ul style="list-style-type: none"> <li>• Normal patterns of uptake, distribution and excretion</li> <li>• Common normal variants</li> <li>• Appearance of common pathologies</li> <li>• Artefacts commonly encountered</li> <li>• Relevance to patient's management / treatment</li> </ul> <p>Functional and anatomical image appearances within the hybrid-imaging environment (<b>SPECT/CT only</b>) will also be discussed.</p> <p><b>The Development of a Nuclear Medicine Report</b> Reporting terminology and the construction of a report will be considered in line with current professional guidance</p> <p><b>Additional Syllabus Content</b> The following areas will also form an integral part of the module delivery:</p> <ul style="list-style-type: none"> <li>• Moral rules: ethical principles and philosophical approaches related to image interpretation</li> <li>• The rights and duties of healthcare professionals.</li> <li>• The contractual obligations of professional practitioners including negligence and general legal principles</li> <li>• Informed consent and the importance of confidentiality</li> <li>• Service enhancement and current clinical legislation / governance</li> <li>• Service re-design, innovation and professional role development</li> <li>• Approaches to decision making in professional practice</li> </ul>
Contact Hours	<p>Contact hours will be achieved through a distance based learning approach which embraces the university's current vision associated with Technology Enhanced Learning. Such learning will include but not be limited to, asynchronous delivery of lecture material through narrated presentations, notes and other guided reading, VLE discussion board forums with specific objectives, workplace tasks, and other study tasks deemed appropriate to the development of student knowledge. The students will also be expected to engage in 'dual reporting' sessions within their clinical workplace in order to complete the portfolio requirements of the module. An approximated breakdown of these contact hours can be seen in the section below.</p> <p>Formative feedback on allocated study tasks will be provided. Contact with the module leader for discussion of module related issues will be facilitated by e-mail, phone conversations or through additional social media sources.</p>
Teaching and Learning Methods	<p>The learning and teaching strategy for this module has been developed to provide students with the opportunity to analyse the current status of Nuclear Medicine reporting services and to consider a number of developmental opportunities that exist within this field for the Nuclear Medicine Practitioner</p> <p>Awareness of current protocols and an appreciation of common Nuclear Medicine appearances will enable the Nuclear Medicine practitioner to develop a reporting portfolio that demonstrates clinical proficiency. In line with the requirements of this type of practitioner the module will also consider decision making skills, the development of a robust reporting framework, the importance of clinical audit and current issues associated with legislation/negligence.</p>

	<p>To ensure engagement throughout the module students will be required to contribute to discussion boards where specific tasks will be set. These tasks will be constructed to help the students meet with the learning outcomes of the module. Contributions to these tasks will form source material from which students may extract content to add to their portfolio/written assignment. Experience from other modules using this format indicates the potential for valuable discussion relating to the module content and helps ensure timely engagement as opposed to leaving personal study and revision to the end of the module delivery. The capacity to engage in debate with peers helps to facilitate networking, peer/shared learning and knowledge exchange.</p> <p>A variety of teaching approaches will be utilised within the module.</p> <p><b>Scheduled learning will</b> include up to 30 hours engaged with lectures, seminars, tutorials, discussion board entries and article critique.</p> <p><b>Independent learning will</b> include up to 120 hours engaged with essential reading, portfolio preparation and construction, assignment construction and personal reflection on learning</p> <p>Additional student centred learning guided by tutorials and discussion will include</p> <ul style="list-style-type: none"> <li>• Evaluation and discussion of current working practices</li> <li>• Consideration as to the future role of the Nuclear Medicine Practitioner</li> </ul> <p><b>Work-Based Learning</b></p> <p>Students will be required to complete approximately twenty five percent of the portfolio cases within “<i>supervised reporting sessions</i>” and time to undertake this should be discussed with the clinical mentor/departmental management prior to the commencement of the module.</p>
Reading Strategy	<p>The following reading strategy will be made available to all students via the module handbook displayed on BlackBoard</p> <p><b>Core Reading</b></p> <p>Any essential reading will be indicated clearly, along with the method for accessing it, e.g. students may be required to purchase a set text, be given a print study pack or be referred to texts that are available electronically through the Library. Module guides will also reflect the range of reading to be carried out.</p> <p><b>Further Reading</b></p> <p>Further reading will be required to supplement the set text and other printed readings. Students are expected to identify all other reading relevant to their chosen topic for themselves. They will be required to read widely using the library search facilities, a variety of bibliographic and full text databases, and Internet resources. Many of these resources can be accessed remotely. The purpose of this further reading is to ensure students are familiar with current research related to the ongoing development of the Nuclear Medicine profession.</p> <p><b>Access and Skills</b></p> <p>The development of literature searching skills is supported by the Library Services web pages which include interactive tutorials on search skills, the use of specific electronic library resources, evaluating information and various referencing styles. Students will be encouraged to access such resources in order to fully utilise the available range of online help. Further support will be provided by the module team again through the creation of narrated presentations</p>
Indicative	Delbeke, D. and Israel, O., eds. (2010) <i>Hybrid PET/CT and SPECT/CT Imaging: A</i>

Reading List	<p><i>Teaching File</i>. New York: Springer</p> <p>Kim, E. (2007) <b><i>Sectional anatomy: PET/CT and SPECT/CT</i></b>. [online] New York: Springer [Accessed 15 April 2013].</p> <p>Biersack, H.J. and Freeman, L.M. (2007) <i>Clinical Nuclear Medicine</i>. New York: Springer Publications.</p> <p>Christian, P. (2012) <b><i>Nuclear Medicine and PET/CT: Technology and techniques</i></b>. 7<sup>th</sup> Ed. New York: Mosby Elsevier.</p> <p>Mettler, F.A. and Guiberteau, M.J. (2012) <i>Essentials of Nuclear Medicine Imaging</i>. 6<sup>th</sup> Ed. Philadelphia: Elsevier Saunders.</p> <p>Morton, K.A. and Clark, P.B. (2007) <i>Diagnostic Imaging. Nuclear Medicine</i>. Salt Lake City: Amirsys.</p> <p>Ziessman H. A., O'Malley J. P. and Thrall J.H., (2006) <i>Nuclear Medicine: The Requisites</i>. 3<sup>rd</sup>ed. Philadelphia: Mosby Elsevier</p> <p>Ziessman, H.A. andRehm, P. (2011) <i>Nuclear Medicine Case Review Series</i>. 2<sup>nd</sup> Ed. Philadelphia: Elsevier Mosby</p> <p><b>Journals Resources</b></p> <p>Seminars in Nuclear Medicine  European Journal of Nuclear Medicine &amp; Molecular Imaging  Journal of Nuclear Medicine  Clinical Nuclear Medicine  Nuclear Medicine Communications  Nuclear Medicine and Biology</p> <p>All journals can be found using the library search on the library webpages (<a href="http://www1.uwe.ac.uk/library/">http://www1.uwe.ac.uk/library/</a>). Off campus users will be able to access journal articles using their UWE network username and password</p> <p>Alternatively, you can search for articles using a database (see below for a list of suitable databases), which will provide search and display facilities.</p> <p><b>Databases</b></p> <p>Anatomy TV  Anatomy &amp; Physiology Online  Cinahl  Cochrane  Embase  Medline</p>
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Part 3: Assessment	
Assessment Strategy	<p>A reporting portfolio and a 1500 word written assignment will be used to assess the achievement of the learning outcomes.</p> <p><b>Component A – Reporting Portfolio</b></p> <p>This practice based assessment requires the production of a clinical portfolio of evidence</p> <p>This portfolio must contain the following</p>

	<ul style="list-style-type: none"> <li>• 130 cases drawn from 4 different areas of clinical practice</li> <li>• 4 clinical reflection each in the region of 300 words</li> </ul> <p><b>Component B – 1500 Written Assignment</b></p> <p>To include a formative review of 'online' clinical cases</p>
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Identify final assessment component and element	<b>A</b>	
% weighting between components A and B (Standard modules only)	<b>A:</b>	<b>B:</b>
	<b>70</b>	<b>30</b>
<b>First Sit</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1.Reporting Portfolio	100%	
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. Written Assignment	100%	

<b>Resit (further attendance at taught classes is not required)</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. Reporting Portfolio	100%	
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. Written Assignment	100%	
<p>If a student is permitted an <b>EXCEPTIONAL RETAKE</b> of the module the assessment will be that indicated by the Module Description at the time that retake commences.</p>		