University of the West of England
BRISTOL

**ACADEMIC SERVICES**

# MODULE SPECIFICATION

| **Part 1: Basic Data** | | | | | | |
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| Module Title | Intermediate Diagnostic Imaging Theory | | | | | |
| Module Code | UZYS1P-30-2 | | Level | 2 | Version | 1 |
| Owning Faculty | Health and Applied Sciences | | Field | Allied Health Professions | | |
| Contributes towards | BSc (Hons) Diagnostic Imaging | | | | | |
| UWE Credit Rating | 30 credits | ECTS Credit Rating | 15 | Module Type | Standard | |
| Pre-requisites | Principles of Patient Care and Diagnostic Imaging | | Co- requisites | None | | |
| Excluded Combinations | UZYS9U-40-2<br>UZYS9V-20-2 | | Module Entry requirements | N/A | | |
| Valid From | September 2015 | | Valid to | September 2021 | | |

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| **CAP Approval Date** | 30 April 2015 |

| **Part 2: Learning and Teaching** | |
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| Learning Outcomes | On successful completion of this module students will be able to:<br>• Demonstrate an analytical understanding and application of the theoretical principles underpinning diagnostic imaging of the human body systems. (Component B)<br>• Critically evaluate and compare the utilisation of different radiographic techniques (Component B)<br>• Critically appraise the relevant pharmacology of contrast agents and drugs commonly used in diagnostic Imaging (Component A)<br>• Demonstrate understanding of the health & safety requirements for diagnostic imaging practice. (Component A)<br>• Discuss the role of Diagnostic Imaging in the management and delivery of patient care. (Component B) |
| Syllabus Outline | <u>Anatomy, disease and clinical applications</u><br>• Imaging modalities and equipment used in the demonstration of anatomy, Physiology and common pathologies within the context of patient care pathways.<br><u>Specialist Imaging areas</u><br>• Emergency department<br>• Mammography<br>• Interventional procedures<br>• Operating theatre and mobile radiography |

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| | Patient types<br>• Multicultural and diversity management of people attending diagnostic imaging.<br>Pharmacology<br>• Contrast media and drug reactions<br>• Pharmaco-dynamics and Pharmaco-kinetics<br>Radiobiology<br>• Effects of radiation on cells<br>• Risk versus benefit of imaging modalities<br>Health and safety issues<br>• Radiation protection<br>• Legal and ethical frameworks |
| Contact Hours | • There will be 72 contact hours of scheduled learning to include lectures, seminars and practical sessions<br>• Students will also be expected to engage with independent learning, including subject specific vodcasts with associated self-directed leaning tasks, directed reading, reflective writing and engagement with online activities. |
| Teaching and Learning Methods | **Scheduled learning** lectures, seminars, tutorials, practical classes<br>**Independent learning** includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc. These sessions constitute an average time per level as indicated in the table below. Scheduled sessions may vary slightly depending on the module choices you make. |
| Key Information Sets Information | Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for. |

**Key Information Set - Module data**

*Number of credits for this module* 30

| Hours to be allocated | Scheduled learning and teaching study hours | Independent study hours | Placement study hours | Allocated Hours |
|---|---|---|---|---|
| 300 | 72 | 228 | 0 | 300 |

The table below indicates as a percentage the total assessment of the module which constitutes a –

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| | **Written Exam**: Unseen written exam,<br>**Coursework**: Written assignment or essay, report, dissertation, portfolio, project<br><br>Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:<br><br>Total assessment of the module:<br>Written exam assessment percentage: 40%<br>Coursework assessment percentage: 60%<br>Practical exam assessment percentage: 0%<br>100% |
| Reading Strategy | Core reading<br><br>Any core reading will be indicated clearly, along with the method for accessing it, eg students may be expected to purchase a set text, be given a study pack or be referred to texts that are available electronically, or in the Library. Module guides will also reflect the range of reading to be carried out.<br><br>Further reading<br><br>All students are encouraged to read widely using the library search, a variety of bibliographic and full text databases and Internet resources. Many resources can be accessed remotely. Guidance to some key authors and journal titles available through the Library will be given in the module handbook and updated annually. Assignment reference lists are expected to reflect the range of reading carried out.<br><br>Access and skills<br><br>Students are expected to be able to identify and retrieve appropriate reading. This module offers an opportunity to further develop information skills introduced at Level 1. Students will be given the opportunity to attend sessions on selection of appropriate databases and search skills. Additional support is available through the library web pages, including interactive tutorials on finding books and journals, evaluating information and referencing. Sign-up workshops are also offered by the Library. |
| Indicative Reading List | The following list is offered to provide validation panels/accrediting bodies with an indication of the type and level of information students may be expected to consult. As such, its currency may wane during the life span of the module specification. *Current* advice on additional reading will be available via the module handbook or Blackboard pages.<br><br>Carver, B. (2012) *Medical Imaging: Techniques, Reflection and Evaluation.* 2nd ed. London: Churchill Livingstone<br><br>Easton, S. (2008) *An Introduction to Radiography.* London: Churchill Livingstone<br><br>Ellis H, Logan B, Dixon A. (2009) *Human Sectional Anatomy: Pocket Atlas of Body Sections, CT and MRI Images*. 3rd ed. Florida: CRC Press |

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| | Gunn, C. (2012) *Bones and Joints – A guide for students.* 6th ed. London: Churchill Livingstone.<br><br>Stewart Whitley, A. (2005) *Clark's Positioning Radiography* 12th ed. Florida: CRC Press<br><br>Sutherland, R. (2007) *Pocketbook of Radiographic Positioning* 3rd ed. London: Churchill Livingstone |

| **Part 3: Assessment** | |
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| Assessment Strategy | The examination will allow the student to be assessed on and demonstrate a depth and breadth of knowledge and understanding of pharmacology, radiobiology and health and safety procedures associated with diagnostic imaging under controlled conditions.<br><br>A written case study will enable the demonstration of an awareness of the role of diagnostic Imaging in the management and delivery of patient care together with a critical comparison of the utilisation of different radiographic techniques. |

| Identify final assessment component and element | **Component A** | |
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| **% weighting between components A and B** (Standard modules only) | **A:** **40%** | **B**: **60%** |

| **First Sit** | |
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| **Component A** (controlled conditions)<br>**Description of each element** | **Element weighting** |
| 1. Exam (1 Hour) | 100% |
| **Component B**<br>**Description of each element** | **Element weighting** |
| 1. Written assignment (2500 words) | 100% |

| **Resit (further attendance at taught classes is not required)** | |
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| **Component A** (controlled conditions)<br>**Description of each element** | **Element weighting** |
| 1. Exam (1 Hour) | 100% |
| **Component B**<br>**Description of each element** | **Element weighting** |
| 1. Written assignment (2500 words) | 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. | |