COURSE SPECIFICATION

Diagnostic Radiography & Medical Imaging

Quality Assurance, Academic Standards and Partnerships

Department of Student and Academic Administration

September 2023

Please refer to the Course Specification Guidance Notes for guidance on completing this document.

Course Title	BSc (Hons) Diagnostic Radiography & Medical Imaging
Final Award	BSc
Exit Awards	Certificate of Higher Education in Health Care Science Diploma of Higher Education in Health Care Science Ordinary Degree in Health Care Science
Course Code / UCAS code (if applicable)	C2718F/ BB81
Mode of study	Full time
Mode of delivery	Campus, block release
Normal length of course	3 years
Cohort(s) to which this course specification applies	From September 2023 intake onwards
Awarding Body	University of Portsmouth
Teaching Institution	University of Portsmouth
Faculty	Science & Health
School/Department/Subject Group	School of Health and Care Professions
School/Department/Subject Group webpage	https://www.port.ac.uk/about-us/structure-and-governance/organisational-structure/our-academic-structure/faculty-of-science-and-health/school-of-health-and-care-professions
Course webpage including entry criteria	https://www.port.ac.uk/study/courses/bsc-hons-diagnostic-radiography-and-medical-imaging
Professional and/or Statutory Regulatory Body accreditations	Health and Care Professions Council (HCPC) College of Radiographers (CoR)
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	Level 4,5,6

This course specification provides a summary of the main features of the course, identifies the aims and learning outcomes of the course, the teaching, learning and assessment methods used by teaching staff, and the reference points used to inform the curriculum.

This information is therefore useful to potential students to help them choose the right course of study, to current students on the course and to staff teaching and administering the course.

Further detailed information on the individual modules within the course may be found in the relevant module descriptors and the Course Handbook provided to students on enrolment.

Please refer to the Course and Management catalogue for further information on the course structure and modules.

Educational aims of the course

The BSc (Hons) Diagnostic Radiography & Medical Imaging programme aims to:

- Develop the knowledge and skills required for a career in radiography including providing evidence-based decisions to support patient care and transferable skills to facilitate personal development.
- Develop critical, analytical, practical, professional, research and communication skills necessary for a patient-centred approach to care and life-long independent learning and acquisition of knowledge and the use of evidence to inform practice.
- Develop ability to demonstrate leadership and clinical reasoning as a member of a multidisciplinary team and have the capacity to evaluate own performance and the performance of peers and students by identifying strengths and weaknesses through reflection.
- Ensure that all statutory requirements are met in order to be eligible to apply for HCPC registration as a diagnostic radiographer.
- Develop the ability to become an independent and autonomous practitioner using independent/autonomous decision making.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The Course Learning Outcomes for this course are outlined in the tables below.

A. Knowledge and understanding of:

LO	Learning outcome	Learning and Teaching methods	Assessment methods
A1	The key theoretical and practical concepts of radiographic practice (physical principles, anatomy, physiology, image interpretation, psychology and sociological principles) and the integration of these into clinical practice through high quality patient centred care.	Learning outcome A1 relates to profession specific topics that allow the student to attain and grasp profession specific skills. A variety of learning and teaching methods are employed to aid in developing the students' strengths and preferred learning styles. These methods will also help students to acquire further educational strategies to meet the required outcomes of relevant modules and allow the student to develop as a professional. It is proposed to use a mixture of lectures, seminars, tutorials, and self-directed study to convey the knowledge required whilst group work, simulation, & clinical placement will be used so that students can apply the knowledge they have attained.	*Exam, Set Exercise,, Portfolio, Viva Voce examination, Report, Oral Assessment/Presentation, Assignment, Project Output, Dissertation*
A2	Evidence based practice and varying research methodologies that contribute to the development of radiographic practice.	Learning outcome A2 has strong links to Evidence Based Decision Making and the Project, as both modules will allow the student to explore and consider research methodologies. The undertaking of research as part of the project may lead to the improvement and development of radiographic practice. It is proposed to use lectures, seminars, tutorials, directed study, group work, practical classes/workshops to convey knowledge of evidence-based practice and research methodologies. Project supervision will assist in the completion of research which may aid development of radiographic practice.	*Coursework, Exam, Project Output, Dissertation*

A3	Key policies and guidelines, including the NHS Constitution, to enhance best practice and create a safe and effective care environment.	Key policies and guidelines in regard to radiography are initially derived from radiation protection and legislation. It can be argued that the clinical learning modules (M32092, M32093, M32094) relate to this learning outcome but practice is governed by legislation which is covered and revisited in M30148, M30149, and M30150. M32730 considers person-centred care which may introduce patient pathways and management to the student. To meet this learning outcome, it is proposed to use lectures, seminars, practical classes/workshops, and tutorials to provide requisite knowledge regarding this outcome.	*Exam, Set Exercise, Viva Voce examination Portfolio*
A4	The role of lifelong learning, reflection, continued professional development, peer support and multi professional working.	The modules pertaining to clinical practice (M32092, M32093, M32094) will have a heavy influence in regard to lifelong learning and continued professional development. Image Interpretation (M25941) introduces skills that can be transposed to lifelong learning and continued professional development. The importance of lifelong learning, reflection, and continued professional development will be conveyed using lectures, seminars, tutorials, directed study, and group work. Further to these, practical classes/workshops, simulation, & clinical placement will provide opportunities to experience lifelong learning and apply the process of reflection. This may be conducted individually, with fellow peers, or when working in a multidisciplinary environment.	*Portfolio, Set Exercise, Exam, Report,, Coursework*
A5	The application of best practice and current knowledge and research to radiographic practice across the health and social care spectrum whilst recognising the contributions made by other health care professionals through partnership working.	M30150 will introduce imaging modalities that can supplement conventional imaging and thus introduce the concept of best practice. The modules pertaining to clinical practice (M32092, M32093, M32094) should introduce the student to best practice from an imaging, treatment, and management perspective and the application of knowledge to the clinical domain. Although lectures, tutorials, seminars, practical classes/workshops may be employed, experiential learning is possibly the main learning and teaching method in respect to clinical practice. Further to this, the project (M24120) should allow the student to consider best practice and how evidence can inform practice. Project supervision is utilised in respect to this.	*Portfolio, Dissertation, Project output (other than dissertation), Report,*

B. Cognitive (Intellectual or Thinking) skills, able to:

LO	Learning outcome	Learning and Teaching methods	Assessment methods
B1			

	Demonstrate an understanding of the relationship between practice and theory, in particular critical evaluation of the existing radiographic practice evidence base and the ability to solve problems in the practice setting.	Students will be taught to think logically, reflectively and evaluate evidence and ideas through critical insight. M32728 will use lectures, seminars, and tutorials to assist the student with searching, retrieving, and summarising evidence that is relevant to a specific aspect of practice. Clinical placement (M32092, M32093, M32094) will aid in applying theory to practice and provide the opportunity to solve problems in the practice setting.	*Set Exercise (coursework), Oral Assessment & Presentation, Portfolio*
B2	Analyse, evaluate, interpret and integrate data from a variety of sources.	These skills are built upon through the course with lectures, seminars, and tutorials being used to assist students with searching for evidence, retrieving it, and then summarising it (M32728). In addition to these methods, practical classes/workshops are introduced (M32729) to consider the strengths and weaknesses of published evidence. The final year project (M24120) then allows the student to critically evaluate published evidence and reflect upon data in relation to current literature and practice. Project supervision is utilised in respect to this.	*Set Exercise (coursework), Oral Assessment & Presentation Portfolio, Assignment, Exam, Project Output*
B3	Research and synthesise existing knowledge and evaluate where there are gaps in the evidence base.	These skills are built upon through the course with lectures, seminars, and tutorials being used to assist students with searching for evidence, retrieving it, and then summarising it (M32728). In addition to these methods, practical classes/workshops are introduced (M32729) to consider the strengths and weaknesses of published evidence. The final year project (M24120) then allows the student to critically evaluate published evidence and reflect upon data in relation to current literature and practice. Project supervision is utilised in respect to this.	*Set Exercise (coursework), Oral Assessment & Presentation Portfolio, Assignment, Exam, Dissertation, Project Output*
B4	Formulate and test a hypothesis through the design, justification, evaluation and reporting of a programme of independent research.	The final year research project develops skills in formulating and testing hypotheses and conducting a programme of research. Although the execution of the project will be assisted via project supervision; students will receive lectures and tutorials to consider effective project design, management and dissemination of findings.	*Dissertation, Project Output*
B5	Assess, prioritise, plan, deliver and evaluate the imaging technique and individual care required by patients.	The modules pertaining to clinical practice (M32092, M32093, M32094) will have a heavy influence in regard to individual care of patients. All of these modules have an inference to patient care within their learning outcomes and students will be taught the theory in respect to person centred care and how this may change for each individual via lectures, practical	*Portfolio, Set exercise (exam),, Exam, Viva Voce examination*

		classes/workshops, seminars, and tutorials. Students will then have the opportunity to apply theory to practice whilst on placement. The same teaching methods are also employed to consider anatomy, physiology, and pathophysiology (M30144 & M32261) which will assist regarding assessing, prioritising, planning, and delivering care for patients.	

C. Practical (Professional or Subject) skills, able to:

LO	Learning outcome	Learning and Teaching methods	Assessment methods
C1	Relate to patients and respond to their psychological and physical needs.	The modules pertaining to clinical practice (M32092, M32093, M32094) will consider how students can respond to the psychological and physical needs of patients using lectures, seminars, and tutorials. Simulation (practical classes/workshops) in these modules will provide opportunities for students to consider and apply knowledge and express alternative approaches to care. Further to these, placement provides an opportunity to apply professional skills attained to a real-life context. In respect to psychological and physical needs, M30144 & M32261 will also assist as knowledge of pathophysiology will allow students to gauge the capability of patients prior to, during, and post examination. The same teaching methods will be employed.	*Portfolio, Set exercise (exam), Practical Skills Assessment, Exam, Viva Voce examination, Set exercise (exam)*
C2	Work autonomously; as part of a team and demonstrate clinical leadership when required.	Clinical placement and simulation (M32092, M32093, M32094) will provide opportunities for students to work autonomously but also as part of a team. For simulation activities, students will be allocated into groups and provided with activities that may involve individual or team working to practise skills in a safe environment. Students will be encouraged to discuss the activities with one another to generate solutions to complex situations that can be applied to clinical practice. As students gain experience with simulation and placement, supervision of tasks in both domains may change from direct to distant. Further to this, students are encouraged to lead and manage an imaging list under supervision towards the end of their training. This provides the opportunity to demonstrate clinical leadership. The concept of clinical leadership is also instigated in M25941 through the notion of the ability to provide informed comments in respect to image interpretation and diagnosis. The foundations of knowledge in respect to image interpretation are conveyed using lectures, practical classes/workshops, and tutorials in M32092, M32093, M32094, and M25941.	*Portfolio, Exam*
C3	Demonstrate equality of care to	Clinical placement and simulation (M32092, M32093, M32094) will provide opportunities for students to	*Portfolio*

	others in an effective and safe manner within radiographic practice.	demonstrate equality of care. Simulation allows students to do this in a safe environment and as this value is grown, placement provides the opportunity to do this effectively.	
C4	Maintain professional practice within the legislation which governs diagnostic radiographers, and understand the scope and limitations	Professional practice is governed by legislation which is covered and revisited in M30148, M30149, and M30150. Such information is conveyed to students using lectures, tutorials, and practical classes/workshops. The clinical modules (M32092, M32093, M32094) then allow students to implement the theory taught to clinical practice. During placement this is evidenced on a day-to-day basis using a portfolio, whilst an annual test is used to ensure students maintain currency in respect to radiation protection legislation (M30148, M30149, and M30150) and understand the scope of their practice.	*Portfolio, Exam, Set Exercise (Exam)*
C5	Identify new learning and adapt to different practice settings.	Clinical placement and simulation (M32092, M32093, M32094) will provide the opportunity for students to identify new learning and adapt to different practice settings. Simulation activities (practical classes/workshops) will allow students to build upon current knowledge, assimilate new experiences, and reflect upon how these can be applied to practice. Contrarily, placement will allow students to gain experience in different areas of imaging. As a result of experience in these areas, students may identify learning needs and indicate this via a personal development plan as part of M32728 and also in learning contracts which are submitted to University Link Radiographers prior to each placement (M32092, M32093, M32094). Lectures, seminars, tutorials, and practical classes/workshops are employed to assist with this.	*Portfolio, Oral Assessment & Presentation Set Exercise (coursework)*

D. Transferrable (Graduate and Employability) skills, able to:

LO	Learning outcome	Learning and Teaching methods	Assessment methods
D1	Communicate ideas and research findings by written, oral and visual means.	Students are introduced to a variety of modes of communication throughout the course for them to meet this learning outcome (M30148, M30149, M30150, M32092, M32729, M32730, M24120, M25941). A combination of lectures, tutorials, practical workshops, seminars, and project supervision are utilised. This culminates with the final year research project to consider dissemination of findings by a variety of means.	*Exam, Set exercise (exam),, Written assignment, Project output, Dissertation,*
D2	Be competent in the use of Information Technology (word processing, databases,	The range of learning and teaching methods employed for M30148, M30149, M30150, M32729, M25941, and M24120 will allow students to demonstrate competency in regard to information	*Exam, Set exercise (exam),, Written assignment,*

	spreadsheets, statistical packages, electronic mail & Internet) and demonstrate numerical and statistical skills appropriate to a scientist.	technology. A combination of lectures, tutorials, practical workshops, seminars, and project supervision encourage interfacing with the information technology packages cited in learning outcome D2. As the course progresses this will move from the use of word processing packages and email towards the use of spreadsheets and statistical packages for the final year project.	*Project output*
D3	Approach problem solving in a systematic way and demonstrate the values required for health and social care.	Clinical placement and simulation (M32092, M32093, M32094) will provide opportunities for students to problem solve in a systematic way. For simulation activities, students will be allocated into groups and provided with activities that may involve individual or team working to practise skills in a safe environment. Students will be encouraged to discuss the activities with one another to generate solutions to complex situations that can be applied to clinical practice. In addition to this, M30149 will provide the student the opportunity to participate with Quality Assurance practicals via simulation and then reflect upon these tests and consider how to rectify these tests if issues arise or data is erroneous.	*Portfolio, Viva voce examination, Exam*
D4	Show an awareness of contextual and interpersonal factors in groups and teams and be able to work independently and as part of a team.	Clinical placement and simulation (M32092, M32093, M32094) will provide opportunities for students to work independently and as a part of a team. Whilst in these environments students will have to consider contextual and interpersonal factors to ensure harmonious working. Further to this, M32730 will support the ability of the student to work with others via two of its learning outcomes. By the end of this module students should be able to work as part of an interprofessional team to investigate and report on a specific health or social care issue. Furthermore, they should be able to evaluate the contributions, responsibilities and challenges for individuals working in interprofessional, integrated care. This module will employ lectures, seminars, and practical classes/workshops to achieve this.	*Portfolio, Report, Set Exercise (coursework)*
D5	Demonstrate effective time management (by undertaking self-directed study and projects) and recognise the need to assess one's own skills	Throughout the course students will be expected to demonstrate effective time management skills including submission of artefacts by specified deadlines, workload capacity regarding clinical practice, and attendance whilst on placement. In regard to specific time management tasks, students will be expected to identify their own learning needs	*Portfolio, Written Assignment, Project Output, Exam, Report, Oral Assessment & Presentation,*

	and to harness them for future learning.	and develop a personal development plan for their academic skills development (M32728). This then feeds into M32730 where this module expects students to be able to reflect upon their own contribution to care. Outcomes from this would then feed into future personal development plans. Furthermore, by the end of M32729 students should be able to explore the stages involved in the design and planning of a project in healthcare. This specific outcome will consider a timeline in regard to completion which ultimately culminates with the final year project (M24120). The teaching methods proposed regarding this specific outcome include lectures, practical classes/workshops, seminars, tutorials.	*Set exercise (coursework), Dissertation*

Academic Regulations

The current University of Portsmouth Academic Regulations will apply to this course.

Support for Student Learning

The University of Portsmouth provides a comprehensive range of support services for students throughout their course, details of which are available at the MyPort student portal.

In addition to these University support services, this course also provides support for student learning in both the academic and clinical environments. This is achieved through a variety of approaches to teaching and learning to stimulate interest and understanding. The programme uses a blended approach making full use of available learning technologies (e.g. Moodle) whilst recognising the value of face-to-face facilitation and interactive collaborative learning opportunities. As the programme progresses independence is increasingly encouraged with the overarching philosophy of student centred learning with discussions, tutorials, and the Centre for Simulation in Healthcare being utilised to support this.

Using the Centre for Simulation in Health and Care, students will participate in laboratory practical's, simulation and enquiry-based learning:

- Laboratory practical's enable students to consolidate material and facilitate the acquisition of manual and team skills; thus, providing opportunities for students to use conceptual knowledge and cognitive processes.

- Simulation enables students to be placed into situations which simulate clinical scenarios. It enables students to practise skills within a safe environment and assists with the transfer of these skills to the clinical domain. It encourages students to generate solutions to complex situations, which will enable them to express alternative approaches to care in practice. To support this a range of technologies are used to facilitate learning e.g. radiographic equipment and simulation models.

- Enquiry based learning (EBL) enables the introduction of a complex situation so that students can embark on a journey of enquiry related to the issues(s) raised. EBL helps students to develop ideas at a high level of cogitation whilst helping them to formulate responses within group dynamics.

Within the clinical environment, learning usually occurs through the process of observation and supervised experience working towards specified learning outcomes. The clinical environment is interprofessional in nature and student learning is supported by clinical staff. The aim of clinical placement is for students to observe, participate and practise developing professional skills and competence in a variety of 'real life' contexts. The experience will enable students to purposely relate theory to the practice and enables skills and knowledge to develop through supervised clinical practice. Learning is further enhanced by student mentoring (when placement blocks overlap), University link radiographers and academic placement lecturers:

- Where the academic year allows, student mentoring offers Level 6 students the opportunity to mentor Level 4 students. This provides the opportunity for peer learning whilst proffering the opportunity to Level 6 students to understand the importance of participation in training, supervision and mentoring (HCPC SoP: 4.8).

- University link radiographers are the main channel of communication between the Hospital Trust and the University for day-to-day matters concerning students. They are primarily responsible for ensuring smooth integration of students into the department and that they are suitably supervised. They will organise rosters to take account of both University requirements and the student's own objectives which are conveyed via learning contracts prior to the placement. Furthermore, they will liaise and consult with students on pastoral issues. University link radiographers are also responsible for facilitating discussions with colleagues who have worked with students in regard to threshold skills pertaining to professional behaviour and conduct.

- University link radiographers are responsible for facilitating discussions with colleagues who have worked with students to decide if threshold skills in regard to practise are met. Where they are not, they will meet students to provide constructive feedback.

- Nominated members of the course team visit the clinical departments to provide students with a supportive and open forum to reflect upon their placement experience. Furthermore, they meet with both staff and students to give and receive feedback on any issues that have occurred whilst also becoming informed of student progress and performance.

Whilst on placement, students will still have access to University support services and access to a virtual learning environment called Moodle. Moodle allows students, without limitation of time and place, to access different learning tools such as course information, course and module handbooks, course content, and specific learning resources. Consequently, this enables students to interact with course material outside of the University offering opportunities for consolidating theoretical aspects of the course whilst away from campus.

Evaluation and Enhancement of Standards and Quality in Learning and Teaching

The University of Portsmouth undertakes comprehensive monitoring, review and evaluation of courses within clearly assigned staff responsibilities. Student feedback is a key feature in these evaluations, as represented in our Policy for Listening to and Responding to the Student Voice where you can also find further information.

Further to this, clinical placements are monitored, reviewed and evaluated by a combination of mechanisms:

- Students are requested to complete a feedback questionnaire at the end of each placement. This is reviewed by the placement lead and then shared with relevant placement sites. This is essential to the quality assurance of all placements and facilitates improvements and/or initiates adjustments to placement settings.
- Nominated members of the course team complete a clinical visit report after each clinical visit. The purpose of the report is to give feedback to the placement lead of any underlying issues with the placement site or individual students.
- Placement sites are audited by the placement lead on an annual basis to ensure currency in regard to student learning and the placement will allow students to meet placement learning outcomes. Areas of good practice are highlighted and recommendations (where appropriate) are made.

As courses in radiography require professional education to provide instruction commensurate with the standards of the Health and Care Professions Council (HCPC), the BSc (Hons) Diagnostic Radiography and Medical Imaging programme meets the educational requirements for statutory registration with the UK regulatory body (Health and Care Professions Council). Upon successful completion, students would be eligible to register with the HCPC and apply for full membership with the Society of Radiographers. Furthermore, the course is accredited by the College of Radiographers.

Reference Points

The Quality Assurance Agency for Higher Education (QAA) sets out a national framework of qualification levels for awarding bodies. The associated standards of achievement are found in their Framework for Higher Education Qualifications document.

The course and outcomes have been developed taking account of:

- University of Portsmouth Curriculum Framework Specification
- University of Portsmouth Code of Practice for Work-based and Placement Learning
- University of Portsmouth: University Vision 2030 and Strategy 2025
- Quality Assurance Agency UK Quality Code for Higher Education
- Quality Assurance Agency Framework for Higher Education Qualifications
- Quality Assurance Agency Qualification Characteristic Statements
- Requirements of Professional and/or Statutory Regulatory Bodies: Health & Care Professions Council (HCPC)
- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards (2019)

- The NHS Constitution
- Health & Care Professions Council (HCPC) Standards of Conduct, Performance and Ethics (2016)
- Health & Care Professions Council (HCPC) Guidance on Conduct and Ethics for Students (2016)
- Code of Professional Conduct (Society of Radiographers, 2013)
- Education & Career Framework for the Radiography Workforce (College of Radiographers, 2022)
- Clinical Supervision – a position statement (College of Radiographers) Experience gained from delivery of previous BSc (Hons) Radiography programmes

Disclaimer

The University of Portsmouth has checked the information provided in this Course Specification and will endeavour to deliver this course in keeping with this Course Specification. However, changes to the course may sometimes be required arising from annual monitoring, student feedback, and the review and update of modules and courses.

Where this activity leads to significant changes to modules and courses there will be prior consultation with students and others, wherever possible, and the University of Portsmouth will take all reasonable steps to minimise disruption to students.

It is also possible that the University of Portsmouth may not be able to offer a module or course for reasons outside of its control, for example, due to the absence of a member of staff or low student registration numbers. Where this is the case, the University of Portsmouth will endeavour to inform applicants and students as soon as possible, and where appropriate, will facilitate the transfer of affected students to another suitable course.

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Document details

Author	*Kevin McHugh*
Date of production and version number	*August 2018 V1*
Date of update and version number	*April 2023 V1*
Minimum student registration numbers	*20*