UNIVERSITY OF PLYMOUTH
Faculty of Medicine and Dentistry

Peninsula Medical School

Programme Specification

MSc Simulation & Patient Safety (full time route) (4636)

MSc Simulation & Patient Safety (part time route) (4620)

2018/19

Brief description of Programme

This programme aims to develop participants who have an interest in applying educational theory to the clinical environment in order to improve patient outcomes. The choice of courses should be of interest to a wide variety of personnel who are involved in training healthcare providers or developing systems to improve patient safety at an organisational level. The programme will cover an in-depth exploration of the range of simulation-based learning modalities that can improve patient safety and quality of care through Enhanced Learning. Critical study of the underpinning theory from education and expert practice, change management and innovation will be incorporated. Participants will be able to advance knowledge, understanding and skills in patient safety and quality improvement with opportunities to apply these skills in the clinical environment. The programme will develop a critical understanding of the factors involved in quality improvement strategies and their evaluation using outcomes related to patient safety. Completion of a project design module prepares participants for undertaking a dissertation. In order to progress to the dissertation stage, the student will need to do the following:

1. Demonstrate an ability to ask a robust, meaningful and focused question, of relevance to their discipline/professional practice, to be addressed by the proposed project
2. Develop a coherent persuasion and business case for the proposed project through the systematic, critical evaluation and synthesis of relevant evidence from a range of sources
3. Demonstrate a practical understanding of the design, methodology and project management appropriate to the proposed project and justify chosen approach
4. Demonstrate a comprehensive understanding of the process of translating knowledge/evidence within their discipline/area of practice and to identify the potential value of the project to end users
5. Demonstrate a critical insight into own ability to successfully complete the proposed project and to identify specific learning and personal development needs required to do so

This could be met by undertaking the Project Design, Development and Knowledge Transfer module or through completion of a project proposal using a recognized format, with input and guidance from the Programme Lead and/or named supervisor.

The programme can be undertaken on a full or part-time basis, following a one day induction event covering masters level learning, the Digital Learning Environment (DLE), library resources and the programme structure, aims and outcomes, by an outstanding team of staff drawn from NHS trusts in Plymouth and Torbay and the University of Plymouth. The Simulation and Enhanced Learning module will be delivered at the Horizon Centre http://www.sdhct.nhs.uk/horizoncentre/facilities/index.php, an exciting innovation, education and research facility based at Torbay Hospital. The Horizon Centre provides a state of the art environment where people can explore new ideas, learn new techniques and observe and reflect on clinical practice together. Within this

facility, the Enhancing Clinical Safety and Excellence through Learning (ECSEL) Simulation Zone provides a range of learning environments including two fully equipped clinical immersion studios, a self-directed learning suite and six other simulation spaces of varying levels of fidelity. Individuals and multi-professional teams use these spaces to engage with a range of high tech manikins, virtual reality part-task trainers and other simulation based learning experiences, in order to master new procedures and develop their clinical practice.

The remaining taught modules will be delivered at the Schools headquarters in the John Bull Building, Plymouth Science Park, where participants will have access to state of the art facilities in the Clinical Skills Resource Centre (CSRC) and the Peninsula Simulation Suite at Derriford Hospital. These facilities provide a vast array of set-ups used for teaching of technical and non-technical skills to undergraduates and postgraduates. A range of audiovisual solutions used for capturing human factors and patient safety issues will be demonstrated.

Distinctive features

- Focuses on integrating simulation and patient safety into the curricula and key learning outcomes of any healthcare education programme.
- Promotes the adoption of technology enhanced learning in multiple disciplines.
- Key component of the mission for the Faculty of Medicine and Dentistry in fostering excellence, innovation and creativity in academic and clinical disciplines across healthcare professions.
- Curriculum aligned with the Department of Health Technology Enhanced Learning Framework and the World Health Organisation Patient Safety Curriculum.
- Promotes the adoption of interprofessional learning strategies to improve patient safety.
- Strongly aligned to strategic objectives of University of Plymouth and the South West Local Education and Training Board.
- Faculty have significant experience of implementing simulation and patient safety programmes in a variety of healthcare institutions in the UK and overseas.

Entry requirements

Normally a recognised first degree or equivalent will be required. Entrants who have acquired experience through work or other means that enables staff responsible for admissions to be confident of the candidate's ability to succeed in the programme may also be considered, in line with QAA guidance. Applicants whose first language is not English will be required to provide evidence of competence in English language. The minimum acceptable English language requirement is IELTS 7.0 or above with no less than 7.0 in each category (listening, reading, speaking, writing).

Accreditation of prior certificated learning (APCL) and accreditation of prior experiential learning (APEL) refer to the process by which previous formal certificated learning and informal non-certificated learning can be awarded credit towards modules within the sphere of Higher Education. Credit for prior learning, whether certificated or experiential, may count towards the requirements for the named award. A student seeking credit (whether certificated or experiential) will normally be required to apply for such credit on receipt of an offer of a place on a programme. Requests for APCL from students already on programmes will be considered provided that the student submits the request in the session before she/he would normally begin the module/stage for which she/he is seeking credit and in the case of requests for APEL at least six months prior to the beginning of the session before she/he would normally begin the module(s)/stage against which she/he is seeking credit. For further information please refer to the Academic Regulations: https://www.plymouth.ac.uk/student-life/your-studies/essential-information/regulations.

The University of Plymouth strives to be an open and accessible organisation; one that upholds the values of equality and diversity and actively stands against all forms of discrimination. For more information on the University's Equality Scheme please see: https://www.plymouth.ac.uk/your-university/about-us/university-structure/service-areas/equality-diversity-and-inclusion/equality-objectives.

The Faculty of Medicine and Dentistry welcomes applications from people with disabilities who will be considered on the same academic grounds as other potential students. Considerations about individual needs arising from disability will be made separately, and we will strive to meet an individual disabled student's needs wherever possible and in consultation with Disability Services. For more information please see: https://www.plymouth.ac.uk/student-life/services/learning-gateway/disability-and-dyslexia.

Programme aims

This programme is intended to:

1. develop advanced knowledge and skills in principles underlying simulation, patient safety and human factors in healthcare and how these are inter-related.
2. promote development, evaluation and analysis of innovative methodology designed to improve patient safety and human factors in healthcare.
3. prepare participants for critically analysing methods which are designed to improve quality and patient outcomes.
4. prepare participants to conduct and evaluate a significant project in simulation, patient safety and human factors.

Programme Intended Learning Outcomes

The programme provides opportunities for participants to develop and demonstrate the general outcomes listed below. The learning outcomes are referenced to institutional masters level 7 descriptors (SEEC 2010). These will be contextualised within each participant's coursework.

Setting

- Operates in complex and specialised contexts (including clinical areas), requiring selection and application from a wide range of advanced techniques and information sources regarding simulation, human factors and patient safety.

Knowledge/ Understanding

- Demonstrates a deep and systematic understanding of current theoretical and methodological approaches to improve quality and safety in healthcare using simulation and patient safety principles.

Cognitive / Intellectual Skills

- Develops critical responses to existing theoretical discourses, methodologies or practices in simulation, human factors and patient safety, and suggests new concepts or approaches.

- Independently critically evaluate appropriate advanced methodology in simulation and patient safety related to their area of clinical practice.

- Designs and undertakes substantial investigations to address significant areas of theory and/or practice. Selects appropriate advanced methodological approaches and critically evaluates their effectiveness.

- Flexibly and creatively applies knowledge in unfamiliar contexts, synthesises ideas or information in innovative ways, and generates transformative solutions.

- Undertakes analysis of complex, incomplete or contradictory evidence/data and judges the appropriateness of the enquiry methodologies used. Recognises and argues for alternative approaches.

Performance and practice

- Autonomously implements and evaluates improvements to human clinical performance drawing on innovative or sectoral best practice.

- Design, conduct and evaluate a project in simulation and patient safety which relates to the healthcare environment.

- Work collaboratively with colleagues and peers to identify areas where quality and patient safety can be improved. Engage with the clinical community and utilise simulation and principles of human factors / patient safety to implement change and improve quality.

Personal and enabling skills

- Critically reflect on own learning needs in support of development as an advanced scholar and evidence-based practitioner in Simulation, Patient Safety, Quality Improvement and Human Factors.

Teaching, learning and assessment strategies

The overall learning, teaching and assessment approaches employed within this programme have been developed in accordance with the educational strategy of the Faculty of Medicine and Dentistry. The overall aim is to improve health outcomes and to facilitate real change in the quality of clinical care and health for individuals and the wider community, regionally, nationally and globally.

Modes of learning

Electronic Learning
A range of electronic-learning resources are available to support the Graduate School's blended approach to teaching and learning.
The Simulation and Patient Safety programme makes extensive use of ICT to support learning and teaching at a distance and is supported by an electronic Digital Learning Environment. This is a password protected, restricted access online environment accessible only to registered students on programmes within the University.

Learning in small groups

Seminars & Workshops
Learning in small groups will be employed to encourage the exchange of information and ideas and to enable students to learn from and with colleagues from a variety of clinical backgrounds. Under the facilitation of a subject expert and/or seminar leader, and following appropriate preparation, participants will be expected to question, critically analyse, evaluate, present and discuss a range of topics.

Tutorials

Participants will have the opportunity to meet with academic and clinical staff in small groups and individually to discuss particular issues in more depth either in person, if possible, or using video conferencing facilities. Each module will include an optional tutorial day held after the taught sessions have been delivered and prior to assessment submission deadlines for participants to meet with the relevant module lead to discuss any concerns they may have regarding the assessment. Participants will also have the

opportunity to submit a draft outline of an assessment to the module lead no later than two weeks prior to the assessment submission deadline (maximum of one side of A4).

Lead Lectures

Lectures will be delivered by experts in a subject to introduce participants to new information and key areas of knowledge.

Learning Portfolios

Learning portfolios will be used by participants to gather evidence of their own learning and skills development. A learning portfolio is not just a diary or record of what has been done but also a record of what has been learned, tried and critically reflected upon. Advantages of portfolios are that they:

- Allow for assessment of experience in non-traditional learning environments
- Allow for self-expression and a greater control of assessment media
- Allow students to demonstrate individuality, originality and creativity with their work
- Allow students to relate the personal relevance of the learning experience to their own professional situation
- Provide a basis for informal discussions with the academic tutor in support of the student's learning and professional development.

The Faculty will support students with a range of formative and summative assessment approaches that will allow them to demonstrate their achievements in relation to the learning outcomes of the programme. Formative assessment will involve opportunities for discussion and feedback from peers and tutors. The summative assessment element for each module will provide students with the opportunity to demonstrate achievement of the intended learning outcomes.

Detailed and specific marking criteria for each assignment will be detailed in the Module Record, in the Programme Handbook, through the Digital Learning Environment and will also be clearly articulated to students throughout the module.

Please refer to the Academic Regulations available at:
https://www.plymouth.ac.uk/student-life/your-studies/essential-information/regulations

Management of Assessment

Assessments are managed through the Subject Assessment Panels and Award Assessment Board. External examiners have responsibility for reviewing and reporting on module assessments with reference to national standards. The Award Assessment Board (including external examiners) will be responsible for referral deadline setting and review of outcomes. External examiners will have the opportunity to review a selection of (or all, in the case of referred assessment) student work submitted for summative assessment. External examiners are invited to attend the Subject Assessment Panels and Award Assessment Board and to provide verbal and written reports to which a formal response will be made by the Programme Lead.

Assessment procedures, detailed marking guidance and assessment criteria are

provided for each module on the Digital Learning Environment.

Support for students and their learning

In addition to the electronic library resources available to students via the Digital Learning Environment and library facilities at the University of Plymouth, students are also able to access the resources at the Discovery Library, Derriford Hospital. Books or articles not held by the University can normally be obtained via an inter-library loan. A wide selection of electronic resources ranging from specialist websites to key databases and electronic journals is available, via the Digital Learning Environment and the University library web pages.

Students will have access to the open access IT suites at the University of Plymouth and the John Bull Building, Plymouth Science Park.

Students on the programme will be supported by the Programme and Module Leads and will be designated a personal tutor in line with the University of Plymouth policy on personal tutoring. The personal tutor will act as a sustained and first point of reference for students on personal, domestic or academic matters including signposting to student support services available via the University. Learning resources and facilities for both individual and group electronic communications between students and between students and tutors are available through the Digital Learning Environment. Students are given a hands-on training session on the use of the Digital Learning Environment during a programme induction event. On-line tutorials are also available to students.

The University of Plymouth provides a wide range of student support services including:

- Learning Development
- English Language Centre
- Careers and Employability
- Accommodation Services
- Student Counselling Services
- Health and Wellbeing
- Disability Services
- Student Union
- International Student Advisory Service
- Faith and Spiritual

Methods for evaluating and improving the quality and standard of teaching and learning

The programme will be monitored and reviewed through the School and Faculty Teaching, Learning and Quality Committees. The Teaching, Learning and Quality Committees will consider the educational provision, including the annual review of the programme which draws on feedback from such sources as external examiners' reports, student evaluation, student achievement and progression data. In addition, subject areas are reviewed through a Periodic Subject Review.

The University details its procedures in the Academic Regulations, the Programme Handbook, and the Quality Assurance Handbook. The Programme Working Group

for the Simulation and Patient Safety programme will meet twice a year and report to the Medical School Programmes Committee, which in turn reports on quality monitoring and assurance to the Medical School Teaching, Learning and Quality Committee.

Mechanisms for review and evaluation of teaching and learning and curriculum outcomes:

- Student feedback (collected by Module Leads following individual sessions and following the submission of the module assessment/s)
- Annual programme review and action plan considered by the Medical School Programmes Committee and the School and Faculty Teaching,Learning and Quality Committees
- Teaching observations
- Standard testing and benchmarking of assessment activities
- External Examiners' reports
- Student representation on Committees
- Staff Student Liaison Committees
- Complaints procedure

Management

- Faculty Teaching, Learning and Quality Committee
- Medical School Teaching, Learning and Quality Committee
- Subject Assessment Panels and Award Assessment Board
- Medical School Programmes Committee
- Programme Working Group

Programme structure

Students studying on a **full-time** basis will normally complete the full Masters programme within 12 months.

Students studying on a **part-time** basis will normally complete each stage of the programme within one academic year.

Postgraduate Certificate stage modules:

SIM711 Simulation and Enhanced Learning

(30 Credits)

OR

SIM715 Human Factors in Healthcare

(30 Credits)

SIM714 Patient Safety and Quality Improvement

(30 Credits)

Postgraduate Diploma stage modules:

SIM715 Human Factors in Healthcare

(30 Credits)

OR

SIM711 Simulation and Enhanced Learning

(30 Credits)

PDD721 Project Design, Development and Knowledge Transfer
(30 Credits)

or an alternative module for those students exiting at the Diploma stage of the programme

Masters stage module:

DIS731 Dissertation

(60 Credits)

Students exiting at the Diploma stage of the programme can choose to undertake an alternative 30 credit module instead of the Project Design, Development and Knowledge Transfer module. Those students continuing to the Masters stage of the programme must undertake the Project Design, Development and Knowledge Transfer module.

In accordance with the University of Plymouth Academic Regulations the award of MSc requires the successful accumulation by the candidate of a minimum of 180 credits. In order to complete the MSc Simulation and Patient Safety students will need to satisfy the academic standards for the required modules as outlined below:

SIM711 Simulation and Enhanced Learning (30 credits)
An in-depth exploration of the range of simulation-based learning modalities that can improve patient safety and quality of care through Enhanced Learning. This module will incorporate critical study of the underpinning theory from education and expert practice, change management and innovation.

SIM714 Patient Safety and Quality Improvement (30 credits)
The aim of this module is to advance knowledge, understanding and skills in patient safety and the application of these to your own workplace. It will introduce the role of human factors and methods for analysis of healthcare systems, together with developing a critical understanding of the current state of patient safety within healthcare and examining strategies to bring about quality improvement.

SIM715 Human Factors in Healthcare (30 credits)
The science of human factors has long been employed in industry to develop safer, efficient and more productive work models. This module focuses on the physical and psychological links between organisations, employees and their work environment and how the concept of human factors influences the way that we work in healthcare. The use of simulation for training and assessment of human factors will be integral to the module.

PDD721 Project Design, Development and Knowledge Transfer (30 credits)
This module will provide students with the knowledge and skills associated with the project design, development and knowledge transfer process. Students will gain practical experience of multi-disciplinary team working through problem identification and problem solving to encourage innovation and creativity in project design, development and knowledge transfer.

DIS731 Dissertation (60 credits)
The aim of the dissertation is to enable students to demonstrate their ability to design, conduct, evaluate and write up a project on a topic that is of relevance to the title and aim of their award and in doing so, to demonstrate self-direction, originality and an ability to act autonomously in the planning and implementation of project skills at an advanced professional level.

Exceptions/ special academic regulations
None

Final award title	MSc Simulation and Patient Safety MSc Simulation and Patient Safety (with Merit) MSc Simulation and Patient Safety (with Distinction)
Level	7
Intermediate award title(s)	Postgraduate Certificate: completion of 60 credits, Postgraduate Diploma: completion of 120 credits
Level	7
Awarding institution	University of Plymouth
Teaching institution	University of Plymouth
Accrediting body	
Appropriate benchmark(s)	
UCAS code	N/A
JACS code	A900

Programme Intended Learning Outcomes Map **Masters in Simulation and Patient Safety**	**Masters (M) Level**	
1 Graduate Attributes and Skills	**2**	**3**
Core Programme Intended Learning Outcomes (using SEEC 2010 descriptors)	**Aim**	**Related Core Modules**
Setting • Operates in complex and specialised contexts (including clinical areas), requiring selection and application from a wide range of advanced techniques and information sources regarding simulation, human factors and patient safety.	2, 3, 4	Simulation and Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare Project design Dissertation
Knowledge/ Understanding • Demonstrates a deep and systematic understanding of current theoretical and methodological approaches to improve quality and safety in healthcare using simulation, patient safety and human factors principles.	1, 4	Simulation and Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare
Cognitive / Intellectual Skills • Develops critical responses to existing theoretical discourses, methodologies or practices in simulation, human factors and patient safety, and suggests new concepts or approaches. • Independently critically evaluate appropriate advanced methodology in simulation and patient safety related to their area of clinical practice. • Designs and undertakes substantial investigations to address significant areas of theory and/or practice. Selects appropriate advanced methodological approaches and critically evaluates their effectiveness. • Flexibly and creatively applies knowledge in unfamiliar contexts, synthesises ideas or information in innovative ways, and generates transformative solutions.	2, 3, 4	Simulation and Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare Simulation and Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare Project Design Dissertation Project Design Dissertation

• Undertakes analysis of complex, incomplete or contradictory evidence/data and judges the appropriateness of the enquiry methodologies used. Recognises and argues for alternative approaches.		Dissertation
Performance and practice • Autonomously implements and evaluates improvements to human clinical performance drawing on innovative or sectoral best practice. • Design, conduct and evaluate a project in simulation and patient safety which relates to the healthcare environment. • Work collaboratively with colleagues and peers to identify areas where quality and patient safety can be improved. Engage with the clinical community and utilise simulation and principles of human factors / patient safety to implement change and improve quality.	1, 2, 3, 4	Simulation and Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare Patient Safety and Quality Improvement Human Factors in Healthcare Project Design Project Design Dissertation
Personal and enabling skills • Critically reflect on own learning needs in support of development as an advanced scholar and evidence-based practitioner in Simulation, Patient Safety and Human Factors.	3, 4	Simulation & Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare Dissertation Simulation & Enhanced Learning Patient Safety and Quality Improvement Human Factors in Healthcare Project Design