UNIVERSITY OF
FORWARD
THINKING
WESTMINSTER

Part one: Programme Specification

Course record information

Name and level of final award:	Foundation Degree in Healthcare Science: Diagnostic Techniques (The *Foundation Degree in Healthcare Science: Diagnostic Techniques* is a *Foundation* degree that is Bologna FQ-EHEA first cycle degree linked or diploma compatible.)
Name and level of intermediate awards:	Certificate of HE
Awarding body/institution:	University of Westminster
Status of awarding body/institution:	Recognised Body
Location of delivery:	Cavendish
Language of delivery and assessment:	English
Course/programme leader:	Chrystalla Ferrier
Course URL:	http://www.westminster.ac.uk/courses/subjects/biomedical-sciences/undergraduate-courses/opendistance-learning/d09pufdb-foundation-degree-in-biomedical-sciences
Mode and length of study:	Blended learning/3 years
University of Westminster course code:	D09PUFDB
JACS code:	
UCAS code:	
QAA subject benchmarking group:	Foundation Degree
Professional body accreditation:	
Date of course validation/review:	April 2012
Date of programme specification:	April 2012

Admissions requirements

All applications for admissions to the FdSc Healthcare Science: Diagnostic Techniques will be handled by the host School's Admissions Team. The admissions criteria are outlined below.

Students must normally have completed a full level 3 qualification in line with University of Westminster's admissions regulations:

- One A level Pass in a related subject
- NCVQ recognised awards, including relevant GNVQ at level 3
- Advanced GNVQ
- International Baccalaureate
- Irish Leaving Certificate with passes in 5 subjects at Higher level
- Pass in a link Foundation course
- Pass in a recognised Access course
- BTEC/SCOTVEC at level 3

International Students

- International qualifications will be assessed in accordance with guidance from the National Academic Recognition Centre (NARIC) for the UK.
- An IELTS score of 6 or equivalent

Mature students

Mature students who do not fulfil the above requirements will receive consideration based on the experience and qualifications outlined in either of the two items below. Significant experience within the biomedical science environment will be expected.

1. A minimum of **two** years full-time or part-time employment in a related area plus:

- Supporting reference from employer
- NVQ Level 3 in an area associated with their role
- Plus five GCSE passes including Mathematics and English Language
  or
- Four passes in the Scottish or Irish Certificate of Education, all at Higher Grade including Mathematics and English Language
- Evidence of key IT skills, Internet, Microsoft Word and optional Excel and PowerPoint

2. A minimum of **three** years full-time or part-time employment in a related area plus:

- Supporting reference from employer
- Evidence of employment related knowledge skills at Level 3, such as Agenda for Change, Knowledge and Skills Framework folder
- Plus five GCSE passes including Mathematics and English Language
  or
- Four passes in the Scottish or Irish Certificate of Education, all at Higher Grade including Mathematics and English Language
- Evidence of key IT skills, Internet, Microsoft Word and optional Excel and PowerPoint
- Evidence of time management skills
- Evidence of grounded motivation for this course

All students
All students will be required to confirm that they have regular access to a personal computer/laptop with Internet access and with specifications and software that enable them to use the University's virtual learning environment Blackboard.

In addition students **must** be in full-time or part-time employment, undertaking work relating to the course and workplace support for their studies. They will require a supporting letter from their employer to this effect.

Accreditation of Prior Learning

Under the University of Westminster's Academic Regulations, a student may be awarded recognition for previous learning through the Accreditation of Prior Certificated Learning (APCL) or Accreditation of Prior Experiential Learning (APEL). This will normally be undertaken at the beginning of the course or when a student first applies for the course. However, a student must apply, with guidance from the course leader, by completing the appropriate form and supplying the appropriate evidence, which will then be considered by the APCL/APEL Board at the University. Should grounds for the award of additional APCL or APEL credits come to light, and the student wishes to apply for them during the course, the course leader can again offer guidance through the process.

For APEL applications

For APEL applications a student will be required to prepare a portfolio of evidence to demonstrate that he/she has the necessary learning to gain exemptions from course modules.

Aims of the course

The course has been developed in partnership with healthcare employers, with the following aim:

- The course has been developed in partnership with healthcare employers and will provide a recognised qualification for a newly created role that spans biomedical science and physiological measurements.

- To provide an appropriate professional qualification for the post currently called Associate Practitioner Healthcare Scientist (stage 4 in the Healthcare Scientists Career Framework, 2005) employed within the UK National Health Service and the related private sector. It is designed for new entrants to the profession as well as existing practitioners wanting continuing professional development.

- To suitably align with the first two years of the Modernising Scientific Careers (MSC) Practitioner Training Programme to facilitate career progression in accordance with MSC.

- To provide graduates with information regarding legislation and guidelines that relate to healthcare provision in their country of employment.

- To equip graduates with the skills, knowledge and behavioural elements required for patient contact within the context of healthcare diagnostic tests.

- To equip graduates with the information technology skills required for the input, retrieval and manipulation of data from diagnostic tests.

- To provide graduates with a range of technical and scientific skills to enable them to autonomously perform and troubleshoot a range of diagnostic tests as defined by their scope of practice.

- To widen participation and lifelong learning by recruiting such professionals who have not previously studied at an institution of higher education.

- To respond to the changing training needs of healthcare science professions by offering a blended learning experience of e-learning, work-based learning and limited block attendance at university.

- To equip graduates with the knowledge, understanding and academic skills to progress onto a BSc Honours programme through further study

- To provide the opportunity for overseas students, for example in sub-Saharan Africa, who are currently working in diagnostic healthcare settings to obtain an internationally recognised qualification by studying this course in their own countries.

- To develop the confidence of the graduates so that they can successfully apply, in the workplace, the knowledge and skills developed on this course.

- To facilitate student personal development planning (PDP) by the inclusion of reflective practice and portfolio production, this can serve the dual purpose of evidence for continuing professional development and professional competency evidence.

Employment and further study opportunities

Today's organisations need graduates with both good degrees and skills relevant to the workplace, i.e. employability skills. The University of Westminster is committed to developing employable graduates by ensuring that:

- Career development skills are embedded in all courses
- Opportunities for part-time work, placements and work-related learning activities are widely available to students
- Staff continue to widen and strengthen the University's links with employers in all sectors, involving them in curriculum design and encouraging their participation in other aspects of the University's career education and guidance provision
- Staff are provided with up-to-date data on labour market trends and employers' requirements, which will inform the service delivered to students.

It is anticipated that all students recruited to this FdSc Healthcare Science Diagnostic Techniques will already be in relevant employment in UK NHS or private healthcare

or in similar positions overseas. The skills and knowledge possessed by students on entry to the course have been acknowledged in the development of the curriculum.

For successfully completing students, the award of this FdSc Healthcare Science Diagnostic Techniques would typically enable direct entry into the second year or third year of a part-time UK Honours degree in a relevant discipline subject.

Learning outcomes

Learning outcomes are statements on what successful students have achieved as the result of learning. These threshold statements of achievement are linked to the knowledge, understanding and skills that a student will have gained on successfully completing a course.

Upon completion of the course the student should be able to:

- Apply knowledge of biological and medical sciences in order that they may analyse and understand the basis of human disease
- Apply knowledge of the principles of selected healthcare science diagnostic tests to the performance and troubleshooting of these tests within the student's scope of practice
- Demonstrate appropriate information technology skills in the workplace and during personal use
- Apply knowledge of the legislation and guidance relating to healthcare provision to effectively and ethically interact with patients who require diagnostic tests
- Effectively communicate opinions and information in a variety of forms to specialists and non-specialists in their workplace
- Possess the qualities and transferable skills necessary for employment and progression to other qualifications
- Evaluate their own academic and professional performance as part of their personal development planning

Knowledge and understanding

Level 4 modules:

The learner can:

- Demonstrate knowledge of underpinning principles, theory and standard practice associated with the role of Associate Practitioner in Healthcare Science.

- Display an understanding of the biology of human diseases and how diagnostic laboratories investigate them.

- Display an understanding of the technical and scientific principles behind selected healthcare science tests.

- Exhibit knowledge of the current legislation that is applicable to healthcare provision in their country of employment

Level 5 modules

The learner can:

- Display an understanding of how the different disciplines of within healthcare science are integrated during the investigation of human diseases

- Demonstrate the technical knowledge required to perform and troubleshoot a selection of healthcare science diagnostic tests

- Place the role of the Associate Practitioner in Healthcare Science within the wider context of other professionals both within healthcare science and, more broadly within other healthcare professions.

Specific skills

Cognitive/Intellectual skills

Level 4

The learner:

- Collects, organizes and analyses data associated with underlying principles and practice of healthcare sciences.

- Solves defined diagnostic-based problems of limited scope using the normal good practice and procedures expected of an associate healthcare practitioner, or equivalent professional, in the workplace.

Level 5

The learner with increasing autonomy:

- Identifies key issues in healthcare science within a range of environments and selects appropriate methods to evaluate them in a balanced and considered way.

- Selects and evaluates techniques for using and applying data, produced, for example, during healthcare science-based diagnostic investigations

- Researches, collects and analyses information for decision making and problem solving using established principles of good practice and applies it to given contexts in the healthcare science diagnostic environment.

Key transferable skills

Level 4

The learner can with support and limited autonomy demonstrate active development of skills applied to activities of limited scope, defined contexts and limited range of standard techniques associated with the following:

- **Group working**: Interaction in group situations with tutors, peers and work colleagues and meeting obligations including negotiation.
- **Learning resources**: Accessing, gathering and use of a range of resources for learning and use.
- **Self-evaluation**: Self-evaluation of strengths and weakness against accepted norms.
- **Management of information**: Collection and management of reliable data from published sources and research simple tasks associated with the healthcare sciences
- **Autonomy**: Take responsibility for own learning in pursuance of a predictable specified range of standard practice techniques associated with healthcare science diagnostic settings
- **Communication**: Effective communication and use of number skills (including the use of ICT), orally and in writing; numeracy
- **Problem solving**: Problem solving of well-defined problems by applying standard methods and tools
- **Career management skills**: Reflection on the process of development of: self-awareness of individual strengths and weaknesses and opportunities and threats associated with the healthcare sector.

Level 5

The learner can, with limited support and guidance, demonstrate that they can evaluate their own strengths and weaknesses and develop strategies to actively develop skills applied to situations of varying complexity and predictability associated with the following:

- **Group working**: Interact effectively in team or group situations exchanging information and responding to changes in a constructive way.
- **Learning resources**: Managing learning using appropriate resources for healthcare sciences, adopting appropriate research strategies and techniques.
- **Self-evaluation**: Evaluating own strengths and weaknesses, demonstrating motivation and reflecting on personal development, challenging opinion and developing own criteria and judgment.
- **Management of information**: Actively managing information by developing sound research strategies, accessing and selecting appropriate data from a range of sources
- **Communication**: Communicating clearly, concisely and effectively.
- **Problem solving**: Participating in problem solving in key areas of healthcare sciences, including action planning and the consideration of consequences.
- **Career management skills**: Reflect on the process of development of: self-awareness of individual strengths and weaknesses, and opportunities and threats, associated with career management.

Learning, teaching and assessment methods

The curriculum design and course delivery of the FdSc Healthcare Science: Diagnostic Techniques are informed by the principles outlined in the University's Learning and Teaching Strategy 2011 – 2015 and Corporate Services Plan, 2010 - 2015. In particular the following:

- Maintain a highly professional teaching and learning staff which is responsive to innovations and challenges in the Higher Education environment and committed to professional development
- Increase and expand the use of technology enhanced learning (TEL)
- Widening participation amongst students with non-traditional qualifications and experience.

The course is planned as a three-year course available to participants who are working full-time or part-time as healthcare practitioners in diagnostic settings.

Learning

You will be encouraged to become self-motivated and independent learners. The curriculum has been designed to meet the professional needs of healthcare practitioners who are both working and learning in an ever changing professional environment. The course acknowledges your professional requirements to manage your personal development and career planning, as outlined in key strategic documents such as NHS *Agenda for Change (2005)*.The course offers blended learning: the majority of the modules will be delivered in Blackboard where emphasis will be placed on encouraging you to communicate with each other, as well as with tutors, to develop and sustain a learning community during your studies. It is also planned to involve your workplaces as part of your learning experience. In three modules, the content is integrated with requirements placed upon you as part of your career progression. You will require between 12 and 20 hours of study per academic calendar week to meet the course requirements.

Teaching

As indicated in the programme (page 6), there are three main teaching approaches employed for the course: e-learning delivered through Blackboard, work-based learning and block teaching. Academic staff with expertise in online learning have been involved at all times in the development of e-learning materials and will also play a key role in maintaining accessibility of teaching materials in Blackboard for you.

Work-based learning will involve the relevant module leader, a work-based tutor and yourself working together to ensure that you receive appropriate support and development opportunities. This will ensure the relevant module teaching can respond to your changing professional needs throughout the course. It will also facilitate input of employers into the teaching and assessment of the FdSc Biomedical Sciences. Since laboratory-based teaching forms an important component of any life sciences programme, block delivery of laboratory sessions have been integrated with the science-based modules. One week of university attendance is programmed in each year for you if you are a UK student to facilitate this. If you are an overseas student, arrangements will be organised with a local education provider. During this block, laboratory-based assessments will also be carried out.

Assessment

Assessment has been planned as an integral part of the learning process, ensuring achievement of specific learning outcomes. Where modules are the same in content as those taught to first and second year undergraduate life science students attending the University, the same assessment strategy will be followed. For modules unique to this course i.e. Practice-based Learning 1, 2 and 3 and Delivering Healthcare A and B, the assessment strategy will ensure linkage with your requirements for the development of skills and knowledge required for your workplace roles.

The Practice-based Learning modules will offer a flexible approach in that the pre-determined assessments will be completed in a timely manner to align with your workplace training rotation. The underpinning knowledge required for these modules will be provided within the modules themselves and Delivering Healthcare A and B.

Course structure

This section shows the core and option modules available as part of the course and their credit value. Full-time Undergraduate students study 120 credits per year.

Credit Level 4				
Module code	**Module title**	**Status**	**UK credit**	**ECTS**
FBMS400	Study Skills	Core	15	7.5
FBMS401	Introduction to Human Anatomy and Physiology 1	Core	15	7.5
FBMS402	Introduction to Human Anatomy and Physiology 2	Core	15	7.5
FBMS407	Biochemistry and Molecular Biology	Core	30	15
FBMS408	Cell Biology	Core	15	7.5
FBMS409	Critical Thinking for Scientists	Core	15	7.5
FBMS410	Practice-based Learning 1	Core	15	7.5
Award of Certificate of Higher Education available				
Credit Level 5				
Module code	**Module title**	**Status**	**UK credit**	**ECTS**
FBMS508	Applied Pathophysiology	Core	15	7.5
FBMS509	Delivering Healthcare A	Core	15	7.5
FBMS510	Practice-based Learning 2	Core	30	15
FBMS511	Delivering Healthcare B	Core	15	7.5
FBMS512	Fundamentals of Disease Diagnosis	Core	15	7.5
FBMS514	Practice-based Learning 3	Core	15	7.5
FBMS***	Principles of Diagnostic Techniques	Core	15	7.5
Award of Foundation Degree available				

Academic regulations

The Foundation Degree in Healthcare Science: Diagnostic Techniques and its intermediate awards operate in accordance with the University's Academic Regulations and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland published by the Quality Assurance Agency for Higher Education (QAA) in 2008.

All students should make sure that they access a copy of the current edition of the general University handbook called Essential Westminster, which is available at westminster.ac.uk/essential-westminster. The following regulations should be read in conjunction with Section 17: Modular Framework for Undergraduate Courses and relevant sections of the current Handbook of Academic Regulations, which is available at westminster.ac.uk/academic-regulations

Award

(i)To qualify for the award of a Foundation Degree in Healthcare Science: Diagnostic Techniques, a student must have:

a) obtained at least 240 credits including:
- a minimum of 30 credits at Level 3 or higher, and a minimum of 90 credits at Level 4 or higher; of which 75 credits must be passed with at least a condoned credit in each of the remaining modules worth 45 credits; and - a minimum of 120 credits at Level Five or

b) satisfied the requirements contained within any course specific regulations for the Relevant Course Scheme; and

c) attempted modules worth no more than 165 credits at Level 5 or above.

(ii) The University may award:

a) a **Foundation Degree with Merit** to a student whose marks average at least 60% across the best 105 credits at Level 5 or higher;

b) a **Foundation Degree with Distinction** to a student whose marks average at least 70% across the best 105 credits at Level 5 or higher.

Support for students

Upon arrival, an induction programme will introduce students to the staff responsible for the course, the campus on which they will be studying, the Library and IT facilities and to the Faculty Registry. Students will be provided with the Course Handbook, which provides detailed information about the course. Students are allocated a personal tutor who can provide advice and guidance on academic matters.

Learning support includes four libraries, each holding a collection of resources related to the subjects taught at their Faculty. Students can search the entire library collection online through the Library Search service to find and reserve printed books, and access electronic resources (databases, e-journals, e-books).

Students can choose to study in the libraries, which have areas for silent and group study, desktop computers, laptops for loan, photocopying and printing services. They can also choose from several computer rooms at each campus where desktop computers are available with the general and specialist software that supports the courses taught at their Faculty. Students can also securely connect their own laptops and mobile devices to the University wireless network.

The University uses a Virtual Learning Environment called Blackboard where students access their course materials, and can communicate and collaborate with staff and other students.

Student Affairs provide advice and guidance on accommodation, financial and legal matters, personal counselling, health and disability issues, careers and the chaplaincy providing multi-faith guidance. The Student Affairs Hub is located at 101 New Cavendish Street, Cavendish House (1st Floor), with an additional office located at the Harrow Campus.

http://www.westminster.ac.uk/study/new-students/when-you-arrive

The University of Westminster Students' Union also provides a range of facilities to support all students during their time at the University. http://www.uwsu.com/

Reference points for the course

Internally

University of Westminster Quality Assurance and Enhancement Handbook 2010, available from http://www.wmin.ac.uk/page-3899

University of Westminster Academic Regulations 2011, available from http://www.westminster.ac.uk/ data/assets/pdf file/0017/105920/Section-1-Introduction-2011.pdf

University of Westminster's *Enhancing the Curriculum @ Westminster* Learning, Learning & Teaching Strategy 2011-15, available from http://www.wmin.ac.uk/page-19547

University of Westminster Corporate Services Plan 2010 – 2015, available from http://www.wmin.ac.uk/pdf/Corporate%20Services%20plan%202010-11.pdf

Externally

The Quality Assurance Agency for Higher Education (QAA) Foundation Degree qualification benchmark (2010)

QAA Descriptor for Higher Education Qualification at level 5: Foundation degrees (August 2008)

SEEC generic level descriptors for HE skills at levels 4 and 5

Department of Health's *Healthcare Scientists Career Framework* 2005

Department of Health (2010) *Modernising Scientific Careers*

Skills for Health (2011)

Professional body accreditation

None at present.

Quality management and enhancement

Course management

The course is managed by a course team, which comprises of academic staff from the Faculty of Science and Technology and staff from and Information Services and Library Services.

Course approval, monitoring and review

The course was initially approved by a University Validation Panel in 2012. The panel included internal peers from the University and external subject specialists from academia and industry to ensure the comparability of the course to those offered in other universities and the relevance to employers. Periodic course review helps to ensure that the curriculum is up-to-date and that the skills gained on the course continue to be relevant to employers.

The course is monitored each year by the Faculty to ensure it is running effectively and that issues which might affect the student experience have been appropriately addressed. Staff will consider evidence about the course, including the outcomes from each Course Committee, evidence of student progression and achievement and the reports from external examiners, to evaluate the effectiveness of the course. The Annual Monitoring Sub-Committee considers the Faculty action plans resulting from this process and the outcomes are reported to the Academic Council, which has overall responsibility for the maintenance of quality and standards in the University.

Student involvement in Quality Assurance and Enhancement

Student feedback is important to the University and student views are taken seriously. Student feedback is gathered in a variety of ways. The most formal mechanism for feedback on the course is the Course Committee. Student representatives will be elected to sit on the Committee to represent the views of their peer group in various discussions. The University and the Students' Union work together to provide a full induction to the role of the course committee.

All students are invited to complete a Module Feedback Questionnaire before the end of each module. The feedback from this will inform the module leader on the effectiveness of the module and highlight areas that could be enhanced. The University also has an annual Student Experience Survey, which elicits feedback from students about their course and University experience.

Students meet with review panels when the periodic review of the course is conducted to provide oral feedback on their experience on the course. Student feedback from course committees is part of the Faculty's' quality assurance evidence base.

For more information about this course:

Please contact Chrystalla Ferrier: c.ferrier@westminster.ac.uk; 020 7911 5000 ext. 64129.

Please note: This programme specification provides a concise summary of the main features of the course and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. This specification should be read in conjunction with the Course Handbook provided to students and Module Handbooks, which provide more detailed information on the specific learning outcomes, content, teaching, learning and assessment methods for each module.