Course Specification

Published Date:	10-May-2019
Produced By:	Oliver Jones
Status:	Validated

Core Information

Awarding Body / Institution:	University of Wolverha	npton	
School / Institute:	Wolverhampton School	of Sciences	
Course Code(s):	BM032P01UV BM032P31UV	Full-time Part-time	12 Months 2 Years
Course Title:	MSc Biomedical Scienc	e (Clinical Biochemistry)	
Hierarchy of Awards:	Master of Science Biomedical Science (Clinical Biochemistry) Postgraduate Diploma Biomedical Science Postgraduate Certificate Biomedical Science University Statement of Credit University Statement of Credit		
Language of Study:	English		
Date of DAG approval:	21/Jun/2017		
Last Review:	2014/5		
Course Specification valid from:	2011/2		
Course Specification valid to:	2020/1		

Academic Staff

Course Leader:	Dr Sara Smith
Head of Department:	Dr Gillian Conde

Course Information

Location of Delivery:	University of Wolverhampton
Category of Partnership:	Not delivered in partnership
Teaching Institution:	University of Wolverhampton
Open / Closed Course:	This course is open to all suitably qualified candidates.

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS

Successful applicants will normally required to have an 2ii (or better) honours degree in Biomedical Science or in a subject with a high proportion of Biomedical Content (ie adequate background knowledge of biochemistry, microbiology, cellular pathology, haematology, genetics and immunology). Students with lesser qualifications who can demonstrate relevant laboratory experience and knowledge (through RPL) may also be accepted. English competence for international applicants should be in-line with University requirements for Masters-level taught degrees (IELTS currently 6.5).

Distinctive Features of the Course:

The University of Wolverhampton has a long-standing reputation for the provision of training in Biomedical Science at all levels and has offered the MSc in Biomedical Science both part-time and full-time for over a quarter of a century. The course makes full use of links with local hospital consultants and laboratory scientists to provide visiting lecturers to ensure teaching of the specialist areas of Biomedical Science is highly relevant and fully up-to-date. The research-active staff who are associated with the Research Institute in Healthcare Science (research evaluated as of national and international excellence at the last Research Assessment Exercise) provide a highly research-focused environment which informs both teaching and the students' own research projects.

Educational Aims of the Course:

This course has the following aims:

To develop a systemic understanding of the knowledge base in the key disciplines in Biomedical Science and to provide those taking this route with a specific in-depth understanding of Clinical Biochemistry

To assimilate information and draw conclusions from current research findings.

To develop a comprehensive understanding of current laboratory techniques and appreciate the current limitations and problems with diagnostic techniques in current practice and consider solutions.

To be critically aware of recent developments within professional practice and professional body requirements in Biomedical Science

To foster the development of key skills needed for employment in situations requiring the exercise of initiative, personal responsibility, and decision making in complex and unpredictable situations.

This course has the following benefits:

- The MSc is accredited by the Institute of Biomedical Science
- There is a wide range of career opportunities afforded by the MSc including those in a variety of NHS and private pathology laboratories, in the pharmaceutical industry and in research (including further study towards PhD and Doctorate of Biomedical Science qualifications).

Intakes:

September

Major Source of Funding:

HE FUNDING COUNCIL FOR ENGLAND (HEFCE)

Tuition Fees:

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2017/8	Н	Full Time	£10000.00
2017/8	EU	Full Time	£10000.00
2017/8	Overseas	Full Time	£12445.00
2017/8	Н	Part Time	£5000.00
2017/8	EU	Part Time	£5000.00
2017/8	Overseas	Part Time	£6223.00
2018/9	Overseas	Full Time	£12700.00
2018/9	HHQ	Full Time	£10200.00
2018/9	CIOM	Full Time	£10200.00
2018/9	OD	Full Time	£10160.00
2018/9	EU	Full Time	£10200.00
2018/9	EUQ	Full Time	£10200.00
2018/9	HDEUD	Full Time	£8160.00
2018/9	Н	Part Time	£5100.00
2018/9	EU	Part Time	£5100.00
2019/0	Overseas	Full Time	£13000.00
2019/0	Н	Full Time	£10400.00
2019/0	EU	Full Time	£10400.00
2019/0	Н	Part Time	£5200.00
2019/0	EU	Part Time	£5200.00

PSRB:

BM032P01UV (Full-time)

Professional Accreditation Body: Institute of Biomedical Science (IBMS)

Accrediting Body: Institute of Biomedical Science (IBMS)

Accreditation Statement: Accredited by the Institute of Biomedical Science (IBMS).

Approved	Start	Expected End	Renewal
01/Jul/2011	01/Jul/2011	01/Sep/2019	01/Sep/2019
BM032P31UV (Part-time)			
Professional Accreditation Body: Institute of Biomedical Science (IBMS)			
Accrediting Body: Institute of Biomedical So	cience (IBMS)		

Accreditation Statement: Accredited by the Institute of Biomedical Science (IBMS).

Approved	Start	Expected End	Renewal
01/Jul/2011	01/Jul/2011	01/Sep/2019	01/Sep/2019

Course Structure:

September (Full-Time)

Year 1

ModuleTitleCreditsPeriodType7BM003Principles of Integrated Biomedical Science20SEM1Core7BC002Molecular Genetics and Genomics20SEM1Core7BM011Approaches to Research in Biomedical Science20SEM1Core7BM001Clinical Biochemistry20SEM2Core7BM004Clinical Immunology20SEM2Core7BM008Specialist Module 120SEM2Core7BM002MSc Research Project60CRYRACore					
7BC002Molecular Genetics and Genomics20SEM1Core7BM011Approaches to Research in Biomedical Science20SEM1Core7BM001Clinical Biochemistry20SEM2Core7BM004Clinical Immunology20SEM2Core7BM008Specialist Module 120SEM2Core	Module	Title	Credits	Period	Туре
7BM011Approaches to Research in Biomedical Science20SEM1Core7BM001Clinical Biochemistry20SEM2Core7BM004Clinical Immunology20SEM2Core7BM008Specialist Module 120SEM2Core	7BM003	Principles of Integrated Biomedical Science	20	SEM1	Core
7BM001Clinical Biochemistry20SEM2Core7BM004Clinical Immunology20SEM2Core7BM008Specialist Module 120SEM2Core	7BC002	Molecular Genetics and Genomics	20	SEM1	Core
7BM004Clinical Immunology20SEM2Core7BM008Specialist Module 120SEM2Core	7BM011	Approaches to Research in Biomedical Science	20	SEM1	Core
7BM008 Specialist Module 1 20 SEM2 Core	7BM001	Clinical Biochemistry	20	SEM2	Core
· · · · · · · · · · · · · · · · · · ·	7BM004	Clinical Immunology	20	SEM2	Core
7BM002 MSc Research Project 60 CRYRA Core	7BM008	Specialist Module 1	20	SEM2	Core
	7BM002	MSc Research Project	60	CRYRA	Core

September (Part-time)

Year 1

Module	Title	Credits	Period	Туре
7BM003	Principles of Integrated Biomedical Science	20	SEM1	Core
7BM001	Clinical Biochemistry	20	SEM2	Core
7BM004	Clinical Immunology	20	SEM2	Core

September (Part-time)

Year 2

Module	Title	Credits	Period	Туре
7BC002	Molecular Genetics and Genomics	20	SEM1	Core
7BM011	Approaches to Research in Biomedical Science	20	SEM1	Core
7BM009	Specialist Module 2	20	SEM2	Core
7BM002	MSc Research Project	60	CRYRA	Core

Learning, Teaching and Assessment

Academic Regulations Exemption:

None.

Reference Points:

QAA subject benchmark (*list those used*)

QAA Biomedical Science: academic standards for biomedical scientists and definitions of subject knowledge and understanding

Framework for Higher Education Qualifications (FHEQ)

Master's Degree Characteristics 2010

http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/MastersDegreeCharacteristics.pdf

Professional, Statutory & Regulatory Body requirements

Criteria and Requirements for the Accreditation and Reaccreditation of MSc degrees in Biomedical Science IBMS (2009)

Equality Act (2010)

As described in University and School documentation.

School documents

Faculty of Science and Engineering: Assessment Handbook. Staff Guide to Procedure and Practice

Learning Outcomes:

PGCert Course Learning Outcome 1 (PGCCLO1)

"Demonstrate a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice with a conceptual understanding that enables the student: 1. to evaluate critically current research and advanced scholarship in the discipline. 2.to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses."

PGCert Course Learning Outcome 2 (PGCCLO2)

"Demonstrate a comprehensive understanding of techniques applicable to your own research or advanced

scholarship and ability to continue to advance your knowledge and understanding, and to develop new skills to a high level."

PGCert Course Learning Outcome 3 (PGCCLO3)

"Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline."

PGCert Course Learning Outcome 4 (PGCCLO4)

"Ability to deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences."

PGCert Course Learning Outcome 5 (PGCCLO5)

"Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level."

PGCert Course Learning Outcome 6 (PGCCLO6)

Demonstrate the qualities and transferable skills necessary for employment requiring: 1. the exercise of initiative and personal responsibility 2. decision-making in complex and unpredictable situations 3. the independent learning ability required for continuing professional development.

PGDip Course Learning Outcome 1 (PGDCLO1)

"Demonstrate a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of your academic discipline, field of study or area of professional practice with a conceptual understanding that enables the student: 1. to evaluate critically current research and advanced scholarship in the discipline 2. to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses."

PGDip Course Learning Outcome 2 (PGDCLO2)

"Demonstrate a comprehensive understanding of techniques applicable to your own research or advanced scholarship and ability to continue to advance your knowledge and understanding, and to develop new skills to a high level."

PGDip Course Learning Outcome 3 (PGDCLO3)

"Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline."

PGDip Course Learning Outcome 4 (PGDCLO4)

"Ability to deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences."

PGDip Course Learning Outcome 5 (PGDCLO5)

"Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level."

PGDip Course Learning Outcome 6 (PGDCLO6)

Demonstrate the qualities and transferable skills necessary for employment requiring: 1. the exercise of initiative and personal responsibility 2. decision-making in complex and unpredictable situations 3. the independent learning ability required for continuing professional development.

Masters Course Learning Outcome 1 (MACLO1)

Demonstrate a systematic knowledge and a critical awareness of current understanding of the academic and practice disciplines of Biomedical Science.

Masters Course Learning Outcome 2 (MACLO2)

"Demonstrate a comprehensive understanding of the practical, professional and/or research skills necessary for creating and interpreting knowledge in a Biomedical Laboratory, including competence in an appropriate range of statistical methods used to analyse data. "

Masters Course Learning Outcome 3 (MACLO3)

"Assimilate and critically appraise evidence from current research and advanced scholarship, exploring the relationship between evidence, current concepts, and new hypotheses at the forefront of Clinical Biochemistry. "

Masters Course Learning Outcome 4 (MACLO4)

"Demonstrate self-direction, decision making and originality; deal with complex issues systematically and creatively, make sound judgements in the absence of complete data, and communicate your conclusions clearly to specialist and non-specialist audiences. "

Masters Course Learning Outcome 5 (MACLO5)

Demonstrate an in-depth knowledge and understanding of Clinical Biochemistry

Overview of Assessment:

Module	Title	Course Learning Outcomes
7BC002	Molecular Genetics and Genomics	MACLO1, MACLO3, MACLO4, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM001	Clinical Biochemistry	MACLO1, MACLO2, MACLO3, MACLO4, MACLO5, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM002	MSc Research Project	MACLO2, MACLO3, MACLO4, MACLO5, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM003	Principles of Integrated Biomedical Science	MACLO1, MACLO2, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM004	Clinical Immunology	MACLO1, MACLO4, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM008	Specialist Module 1	MACLO1, MACLO2, MACLO3, MACLO4, MACLO5, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM009	Specialist Module 2	MACLO1, MACLO2, MACLO3, MACLO4, MACLO5, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6
7BM011	Approaches to Research in Biomedical Science	MACLO2, MACLO3, MACLO4, PGCCLO1, PGCCLO2, PGCCLO3, PGCCLO4, PGCCLO5, PGCCLO6, PGDCLO1, PGDCLO2, PGDCLO3, PGDCLO4, PGDCLO5, PGDCLO6

- Lectures to provide research and practice-based comprehension of the major areas of Biomedical Science to an advanced level.
- Tutorials to focus understanding gained in lectures on research or case-based issues and to underpin this understanding by making it relevant to clinical situations.
- Seminars to allow exchange of ideas and knowledge with peers and with tutors.
- Workshops to develop practical skills such as information and data-handling.
- Research project to enhance practical research skills, problem-solving abilities and competencies to analyse, evaluate and present research.

Student Support:

Tutor support is available formally through timetabled tutorials. Demonstrators are available for individual appointments to assist with generic study skills. Electronic support is available via VLE. Academic skills are developed through feedback on assessments and through individual appointments available with tutors.

Employability in the Curriculum:

Graduates who have obtained the MSc in Biomedical Sciences will be eligible to seek employment in the following areas:

National Health Service(NHS) pathology laboratories *(subject to HCPC registration which may also require additional study of specified undergraduate modules)*

Public Health England/ microbiology laboratories

Blood Transfusion Service Laboratories

Veterinary and agricultural laboratories

Forensic laboratories

Private Pathology Service Laboratories

Research Laboratories

Industrial Biomedical Science roles

Pharmaceutical Industry roles

The MSc Biodmedical Science also provides suitable preparation for further research/professional study at Doctoral level leading to a PhD or Professional doctorate (DBMS).



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