Template C4



Programme Specification

Title of Course: MSc Biomedical Science Haematology

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current version	
Version number	4
Faculty	Faculty of Health, Science, Social Care & Education
School	School of Life Sciences, Pharmacy and Chemistry
Department	Department of Biomolecular Sciences
Delivery Institution	

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

SECTION 1: GENERAL INFORMATION

Award(s) and Title(s): <i>Up to 10 pathways</i>	MSc Biomedical Science Haematology
Intermediate Awards(s) and Title(s):	PG Cert Biomedical Science Haematology
There are 4 Intermediate awards for each pathway	PG Dip Biomedical Science Haematology
Course Code	PPBSH1BSH20
For each pathway and mode	PFBSH1BSH20
of delivery	
UCAS code	
For each pathway	

Award(s) and Title(s):	MSc Biomedical Science Haematology with Professional
<i>Up to 10 pathways</i>	Placement
Intermediate Awards(s) and	PG Cert Biomedical Science Haematology with
Title(s):	Professional Placement
There are 4 Intermediate	PG Dip Biomedical Science Haematology with
awards for each pathway	Professional Placement
Course Code For each pathway and mode of delivery	
UCAS code For each pathway	

Award(s) and Title(s): <i>Up to 10 pathways</i>	MSc Biomedical Science Haematology with Management Studies
Intermediate Awards(s) and Title(s): There are 4 Intermediate awards for each pathway	PG Cert Biomedical Science Haematology with Management Studies PG Dip Biomedical Science Haematology with Management Studies
Course Code For each pathway and mode of delivery	
UCAS code For each pathway	

Award(s) and Title(s):	MSc Biomedical Science Haematology with Management
<i>Up to 10 pathways</i>	Studies with Professional Placement

Intermediate Awards(s) and	PG Cert Biomedical Science Haematology with
Title(s):	Management Studies with Professional Placement
There are 4 Intermediate	PG Dip Biomedical Science Haematology with
awards for each pathway	Management Studies with Professional Placement
Course Code For each pathway and mode of delivery UCAS code For each pathway	

RQF Level for the Final Award:	
Awarding Institution:	Kingston University
Teaching Institution:	
Location:	Penrhyn Road
Language of Delivery:	English
Modes of Delivery:	Full-time Part-time With Professional Placement
Available as:	Full field
Minimum period of	Full-time - 1
registration:	Part-time - 2 With Professional Placement - 2
Maximum period of	Full-time - 2
registration:	Part-time - 4
	With Professional Placement - 3
Entry Requirements:	Lower second class honours degree and above or equivalent in Biomedical science or other related biology and medical science degrees will be considered on an individual basis. All applicants must demonstrate sufficient understanding of mammalian biology and immunology. Prior study of haematology is strongly preferred. For international students: An IELTS academic test in English with an overall score of 6.5, with no element below 6.0, or meet the scores listed on the alternative online tests
Programme Accredited by:	Institute for Biomedical Science (IBMS)
QAA Subject Benchmark Statements:	n/a
Approved Variants:	n/a

Is this Higher or Degree	
Apprenticeship course?	

For Higher or Deg	gree Apprenticeship proposals only
Higher or Degree Apprenticeship standard:	n/a
Recruitment, Selection and Admission process:	n/a
End Point Assessment Organisation(s):	n/a

SECTION 2: THE COURSE

A. Aims of the Course

MSc Biomedical Science Haematology/with Professional Placement programme are;

- to develop and extend beyond honours degree level students' knowledge of topics in Biomedical Science,
- to prepare students for employment, research, further study and lifelong learning by developing their intellectual, problem solving, practical and key (transferable) skills,
- to produce graduates with a knowledge and skills base that allows pursuit of careers in a wide variety of work environments,
- to encourage students to develop an informed, reflective and critically analytical approach to the subject of Biomedical Science,
- to provide an education in the theoretical and applied aspects of pathology at cellular and systemic levels,
- to convey an understanding of the theoretical and practical basis of modern molecular medicine,
- to develop an awareness of organisational relationships and interdependencies between specialist disciplines within diagnostic pathology,
- to develop the in-depth study of Haematology,
- to convey an understanding of the molecular basis of immunological mechanisms,
- to develop the ability to source information and to understand and critically appraise a research paper or article, including an assessment of the experimental design and methods of statistical analysis,
- to develop competence in the public presentation of scientific work,
- to enable students to carry out a sustained piece of independent research work related to Haematology,
- to develop the students' research oriented practical and analytical skills,
- to enable students to write an extended report on their research work.
- Give students on the 2 year version an opportunity to develop further skills, preparing them for higher levels of employment

MSc Biomedical Science Haematology with Management Studies/with Professional Placement programme are;

- to prepare students for employment, research, further study and lifelong learning by developing their intellectual, problem solving, practical and key (transferable) skills
- to produce Masters graduates with a knowledge and skills base that allow pursuit of careers in a wide variety of work environments
- to provide an education in the theoretical and applied aspects of pathology at cellular and systemic levels
- to convey an understanding of the theoretical and practical basis of modern molecular medicine
- to develop an awareness of organisational relationships and interdependencies between specialist disciplines within diagnostic pathology
- to convey an understanding of the molecular basis of immunological mechanisms
- to develop the in depth study of Haematology
- to develop the ability to source information and to understand and critically appraise a research paper or article, including an assessment of the experimental design and methods of statistical analysis
- to enable students to carry out a sustained piece of independent research work related to Haematology.
- to develop the students' research oriented practical and analytical skills

- to enable students to write an extended report on their research work
- to develop a wide range of management, business and leadership/team skills appropriate for managers and entrepreneurs in complex business environments.
- to develop competence in the presentation of scientific work and business plans
- to encourage students to develop an informed, reflective and critically analytical approach to the subject of Biomedical Science and Management
- to develop and extend beyond honours degree level students' knowledge of topics in Biomedical Science and Management

B. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the areas noted in the table below. There are no QAA benchmarks for this subject at level 7, but the programme outcomes are referenced to the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2014), and the IBMS 'Criteria and Requirements for the Accreditation and Re-accreditation of MSc Degrees in Biomedical Science', and relate to the typical student.

The programme learning outcomes are the high-level learning outcomes that will have been achieved by all students receiving this award. They must align to the levels set out in the <u>'Sector Recognised Standards in England'</u> (OFS 2022).

	Knowledge and Understanding		Intellectual Skills		Subject Practical Skills
	On completion of the course students will be able to:		On completion of the course students will be able to		On completion of the course students will be able to
A1	the principles and practice of a variety of topics in Biomedical Science	B1	demonstrate the ability to learn independently	C1	understand, and be able to comply with, safety in the laboratory
A2	the principles of constructive criticism in Biomedical Science	B2	undertake the analysis and interpretation of experimental data	C2	demonstrate competence in a range of practical and analytical techniques appropriate to Biomedical Science
A3	the biological basis of disease	B3	apply subject knowledge and understanding to the solving of problems in Biomedical Science	C3	demonstrate skills in the evaluation, presentation, and interpretation of laboratory data
A4	the principles and applications of a range of molecular techniques relevant to Biomedical Science	B4	assemble, interpret and critically evaluate information and data from a variety of sources (including both academic literature and their own findings)	C4	demonstrate new and/or improved practical skills and apply them in a research setting
A5	the role of the pathology laboratory within the wider context of health care	B5	use their generic intellectual and key skills in their lifelong learning and future employment	C5	apply their subject specific knowledge to the planning, design and delivery of an experimental research project
A6	the human immune system, its components and interactions at a molecular level and the relationship between the science of immunology and the aetiology and diagnosis of disease	B6	apply independent judgement and original thought in a variety of contexts relevant to Biomedical Science	C6	give a clear account of how the skills and knowledge acquired during studies can be applied in a work-place environment

A7	the principles and practice of a range of topics within an elected specialist route -Haematology	B7	demonstrate self-management and autonomy in the planning, organisation and conduct of an independent research project	C7	demonstrate skills in the evaluation, presentation and interpretation of entrepreneurial skills and demonstrate commercial awareness relevant to biomedical sciences and biotechnology
A8	the increasingly important relationships between traditionally separate subjects within the broader field of Biomedical Science	B8	present their own research in a clear and concise fashion in writing and in scientific poster presentations		
A9	the principles of objective scientific research				
A10	the ethical implications of Biomedical Science research				
A11	the statistical and computing techniques required to assess and present their own data				
A12	the range of career opportunities available within the field of Biomedical Sciences				

In addition to the programme learning outcomes, the programme of study defined in this programme specification will allow students to develop the following range of Graduate Attributes:

- 1. Creative Problem Solving
- 2. Digital Competency
- 3. Enterprise
- 4. Questioning Mindset
- 5. Adaptability
- 6. Empathy
- 7. Collaboration
- 8. Resilience
- 9. Self-Awareness

C. Outline Programme Structure

n/a

MSc Biomedical Science Haematology

Level 7								
MSc Biomedical Science Haematology								
Core modules	Modul e code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time	
Anaemia, Haemostasis & Blood Transfusion	LS700 5	30	7	1		1	1	
Haematological Malignancy	LS700 6	30	7	2		1	1	
Immunology and the Biology of Disease	LS700 2	30	7	1		1	1	
Research Project	LS701 0	60	7	3		1	1	
Research Techniques & Scientific Communication	LS700 1	30	7	2		1	1	
Optional Modules								

Level 7 information

Full time students attend two days per week Part time students attend one day per week

Students exiting the programme with 60 level 7 credits are eligible for the award of PgCert in Biomedical Science Haematology

Students exiting the programme with 120 level 7 credits are eligible for the award of PgDip in Biomedical Science Haematology

Level 7										
MSc Biomedical Science Haematology with Professional Placement										
Core modules	Modul e code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time			
Anaemia, Haemostasis & Blood Transfusion	LS700 5	30	7	1		1	1			
Haematological Malignancy	LS700 6	30	7	2		1	1			
Immunology and the Biology of Disease	LS700 2	30	7	1		1	1			
Professional Placement	CH790 0	120	7	Year long		2	1			
Research Project	LS701 0	60	7	3		1	1			
Research Techniques & Scientific Communication	LS700 1	30	7	2		1	1			
Optional Modules										

MSc Biomedical Science Haematology with Professional Placement

Level 7 information

Full time students attend two days per week

Part time students attend one day per week

Students exiting the programme with 60 level 7 credits are eligible for the award of PgCert in Biomedical Science Haematology

Students exiting the programme with 120 level 7 credits are eligible for the award of PgDip in Biomedical Science Haematology

MSc Biomedical Science Haematology with Management Studies

Level 7										
MSc Biomedical	MSc Biomedical Science Haematology with Management Studies									
Core modules	Modul e code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time			
Business in Practice	CI7600	30	7	1		1	1			
Haematological Malignancy	LS700 6	30	7	2		1	1			

Immunology and the Biology of Disease	LS700 2	30	7	1	1	1
Research Project	LS701 0	60	7	3	1	1
Research Techniques & Scientific Communication	LS700 1	30	7	2	1	2
Optional Modules						

MSc Biomedical Science Haematology with Management Studies with Professional Placement

Level 7											
MSc Biomedical Science Haematology with Management Studies with Professional Placement											
Core modules	Modul e code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time				
Business in Practice	CI7600	30	7	1		1	1				
Haematological Malignancy	LS700 6	30	7	2		1	1				
Immunology and the Biology of Disease	LS700 2	30	7	1		1	1				
Professional Placement	CH790 0	120	7	Year long		2	1				
Research Project	LS701 0	60	7	3		1	1				
Research Techniques & Scientific Communication	LS700 1	30	7	2		1	1				
Optional Modules											

Level 7 information

Full time students attend two days per week

Part time students attend one day per week

Students exiting the programme with 60 level 7 credits are eligible for the award of PgCert in Biomedical Science Haematology

Students exiting the programme with 120 level 7 credits are eligible for the award of PgDip in Biomedical Science Haematology

Students exiting the programme with 60 level 7 credits are eligible for the award of PgCert in Biomedical Science Haematology with Management Studies Students exiting the programme with 120 level 7 credits are eligible for the award of PgDip in Biomedical Science Haematology with Management Studies

D. Principles of Teaching, Learning and Assessment

Students on MSc in Biomedical Science Haematology/with Professional Placement and MSc in Biomedical Science Haematology with Management Studies/with Professional Placement come from a wide variety of backgrounds (e.g. recent graduates from Kingston, recent graduates from other UK institutions, those returning to study after a break, overseas students, and all are likely to find the programme challenging for different reasons. These individual challenges, coupled with the higher demands of a postgraduate programme that is completed within 12 months, guide our teaching and assessment which are designed to ensure that students are given the best opportunity to learn effectively.

The Research Project, which comprises one third of the programme, is designed as a 'capstone' project, and aims to give students the opportunity to use and synthesise the knowledge and skills they have acquired during their degree e.g. by using aplied "real world learning" (such as working on a live project for an employer), presenting work in formats appropriate to wider audiences, practice new and/or improved laboratory skills, and - most importantly - demonstrate the ability to independently solve complex problems

There are four Curriculum Design Principles, and these are linked to the teaching, learning and assessment strategies for the programme (see section C of this document) as follows:

Assessment for learning designed at programme level with opportunities for feedback and 'feedforward' explicitly specified at the design stage;

- All assessments have been designed at level 7; students are encouraged to reflect on the link between intended learning outcomes and the requirements for each assessment, and ensure that they understand how they can meet these. Examples of this are the Layman's pamphlet report in LS7006 (Haematological Malignancy) that is summatively assessed before final submission of a laboratory practical report.
- Students will receive feedback on all assessments; this will take a variety of forms and may be individual, group or generic and may be provided by teaching staff, peers (fellow students) or visiting experts.
- Feedback will enable the students to learn from each assessment experience and feedforward that learning to future assessments, most critically to the final assessments in the summer Research Project module. The 'Critical Review' assessment in LS7001 (Research techniques and scientific communication) is designed to prepare students for their Research Project by allowing them to gain a deeper understanding of aspects of their research such as; the generation of a suitable hypothesis, correct experimental design to test this hypothesis, ethical considerations, health and safety.

Research-led and research informed teaching with increased opportunities for postgraduate research and capstone projects;

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- The Curriculum content is heavily research-led and research informed.
- Modules incorporate opportunities to explore current developments in the field.

- Teaching teams draw on the academic strengths and research interests of staff.
- Students complete their MSc by conducting a research project.

A robust, academically-led personal tutor system which helps to personalize students' experience and track their academic development.

An embedded employability curriculum at discipline level and explicit links to the cocurriculum;

- Employability skills are embedded into several modules, including 'applying for funding' (LS7001), and 'industry specific recruitment information' (e.g., from external expert practitioner lecturers in specialist subject modules see section G of this document),
- Communication skills ('presenting your published work') are emphasized in all modules in a variety of media, including written, oral and poster presentations.
- Key laboratory-based skills are included in the taught modules and in the independent research projects, for which students may have an opportunity to take up a placement outside Kingston University.
- Specialist visiting lecturers from Industry, the Health Service and research organisations and also visits to these organisations provide great insight into employability skills.

E. Support for Students and their Learning

In order to assist students in achieving their learning outcomes, the Faculty of Health, Science, Social Care and Education has a raft of initiatives to support postgraduate students in both academic and pastoral issues. These are summarised below, and include skills workshops that offer English language support, academic surgeries, detailed induction and orientation programmes at the start of the academic year, and subject-based conference style events. Advice on generic study skills is available on the virtual Learning Environment (Canvas) to which all students have access; this includes advice on writing, oral communication, numeracy, problem-solving and career management, among others.

Students also have access to Academic Success Centre (ASC), which provides a 'drop in' service giving advice on all non-subject based aspects of academic work including;

- grammar and punctuation,
- academic structure
- referencing and plagiarism
- maths skills

Students are encouraged to discuss academic and pastoral concerns with their Course Leader/personal tutor, and all academic staff operate a system of Office Hours during which students can consult their lecturers. In addition, each faculty has a

student achievement advisor to support students in all aspects of their education, including pastoral issues.

The Personal Tutor Scheme (PTS) has been designed to ease a student's transition into postgraduate study by building a rapport between themselves and academic staff as soon as possible, so personalising their experience at Kingston. Students are placed in small tutorial groups, and are encouraged to work together to provide mutual support. Where possible these groups will include a mix of Kingston alumni, UK and overseas students, and they will meet with their personal tutor two to three times in each teaching block.

The PTS aims;

- To provide appropriate academic advice and guidance to students throughout their time at Kingston by monitoring their progress and helping to identify individual needs.
- To foster a close and engaged academic relationship with students and advise and refer students to other University services as appropriate
- To help to develop students' ability to be self-reliant and self-reflective and their ability to use feedback to best advantage
- To provide a link between curricular and co-curricular aspects of employability

Summary of Student Support

- A personal tutor who provides academic and personal support
- A Module Leader for each module
- A Course Leader to help students understand the programme structure,
- Technical support to advise students on IT and the use of software
- A designated programme administrator
- An induction week at the beginning of each new academic session
- Student Voice Committee
- Canvas a versatile on-line interactive intranet and learning environment
- A substantial Academic Success Centre that provides academic skills support
- Student support facilities that provide advice on issues such as finance, regulations, legal matters, accommodation, international student support etc.
- Disabled student support
- Union of Kingston Students
- Careers and Employability Service

F. Ensuring and Enhancing the Quality of the Course

The University has several methods for evaluating and improving the quality and standards of its provision. These include:

- External examiners
- Student voice committees
- Annual Monitoring and Enhancement

- Continuous Monitoring of courses through the Kingston Course Enhancement Programme (KCEP+)
- Student evaluation including Module Evaluation Questionnaires (MEQs), and the postgraduate Student Survey (PSS).
- Moderation policies
- Feedback from employers/Industrial liaison

G. Employability and work-based learning

Students' employability skills are developed throughout this course, both through activities that are embedded within the syllabus and from services offered by the University's Careers and Employability Service. Biomedical science modules have been designed to meet the requirements of a Master's level qualification accredited by the IBMS, and as such prepare students for a career in hospital-based biomedical science laboratories and related industries.

Students are helped to reflect on the transferable skills they have acquired and their relevance to employment. Students are also encouraged to explore the job market and possible career paths, and to consider attributes that employers look for beyond essential academic skills, such as initiative, teamwork, time management, motivation to improve performance, and appropriate communication skills. Students are encouraged to take advantage of opportunities within and outside of the university to develop skills through voluntary roles such as Course Representative. Students are also encouraged to develop clear ideas about possible career options, and are offered assistance and guidance in the preparation of CVs and for job applications and interviews.

Current employers are involved in the delivery of the course, and ensure that the content of the course, and the knowledge and skills that students acquire, are appropriate to workplace requirements.

Emphasis is also placed on the transferability of these skills, and graduates of this course have taken up posts in a variety of employment settings including the NHS, commercial and research laboratories (for example GlaxoSmithKline, the Animal Health and Veterinary Laboratories), and diagnostic instrument and reagent manufacturers. Skills learned and developed during the research project have often allowed students to secure job interviews and employment and/or to finalise their employment ambitions. Some students continue with their studies, and the course is an excellent basis for those who intend to pursue a research career via a PhD. Additionally, the degree can be used as a qualification for entry to PGCE teacher training.

For students already in employment the course offers an opportunity to enhance their knowledge and to develop their practical, intellectual and key skills to assist them in their career development.

Work-based learning, including sandwich courses and higher or degree apprenticeships

Work placements are actively encouraged – although it is the responsibility of individual students to source and secure such placements. This allows students to reflect upon their own personal experience of working in an applied setting, to focus

on aspects of this experience that they can clearly relate to theoretical concepts and to evaluate the relationship between theory and practice. MSc Biomedical students on full time study have the optional opportunity to be paced on the professional placement (PP) program extending their degree course by an extra year to their studies. The program is an important steppingstone in providing work-based experiences and developing key employability skills. It is the responsibility of the students to secure their own placements, where the placement lasts for 10-12 months and is directly related to biomedical sciences. Allied to the program is the PP module providing students with the skills and knowledge to secure a placement in a working environment. The PP module provided exercises in preparing CVs and applications, interview techniques and networking. During the placement, the student completes a 1,000-word reflective essay. Only on completion of the program and submission of the dissertation can students pass the PP module.

H. Other sources of information that you may wish to consult

Further information on the requirements of the Institute of Biomedical Science can be found on the official site: https://www.ibms.org/home/

I. Development of Course Learning Outcomes in Modules

This table maps where course learning outcomes are **summatively** assessed across the modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code		Level 7							
		LS7002	LS7005	LS7001	LS7010	LS7006	C17600	CH7900	
	A1								
	A2								
	A3								
	A4								
Knowledge & Understanding	A5								
	A6								
	A7								
	A8								
	A9								

	A10				
	A11				
	A12				
	B1				
	B2				
	B3				
Intellectual Skills	B4				
Intellectual Skills	B5				
	B6				
	B7				
	B8				
	C1				
	C2				
	C3				
Practical Skills	C4				
	C5				
	C6				
	C7				

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.