

Template C4



Programme Specification

Title of Course: *BSc (Hons) Biomedical Science*

Date first produced	31/05/2012
Date last revised	11/04/2024
Date of implementation of current version	02/09/2024
Version number	7
Faculty	Faculty of Health, Science, Social Care & Education
School	School of Life Sciences, Pharmacy and Chemistry
Department	Department of Biomolecular Sciences
Delivery Institution	Kingston University

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 module 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>	BSc (Hons) Biomedical Science
Intermediate Awards(s) and Title(s): <i>There are 4 Intermediate awards for each pathway</i>	Cert HE Biomedical Science BSc Biomedical Science Dip HE Biomedical Science
Course Code <i>For each pathway and mode of delivery</i>	UPBMS1BMS01 UFBMS1BMS01
UCAS code <i>For each pathway</i>	B930 (Single honours) B931 (with sandwich), B948 (with foundation).

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

Award(s) and Title(s): <i>Up to 10 pathways</i>	BSc (Hons) Biomedical Science (with Foundation Year)
Intermediate Awards(s) and Title(s): <i>There are 4 Intermediate awards for each pathway</i>	Cert HE Biomedical Science (with Foundation Year) BSc Biomedical Science (with Foundation Year) Dip HE Biomedical Science (with Foundation Year)
Course Code <i>For each pathway and mode of delivery</i>	
UCAS code <i>For each pathway</i>	

Award(s) and Title(s): <i>Up to 10 pathways</i>	BSc (Hons) Biomedical Studies
Intermediate Awards(s) and Title(s): <i>There are 4 Intermediate awards for each pathway</i>	Dip HE Biomedical Studies BSc Biomedical Studies
Course Code	

For each pathway and mode of delivery	
UCAS code For each pathway	

Award(s) and Title(s): Up to 10 pathways	BSc (Hons) Biomedical Studies (with Professional Placement)
Intermediate Awards(s) and Title(s): There are 4 Intermediate awards for each pathway	Dip HE Biomedical Studies (with Professional Placement) BSc Biomedical Studies (with Professional Placement)
Course Code For each pathway and mode of delivery	
UCAS code For each pathway	

Award(s) and Title(s): Up to 10 pathways	BSc (Hons) Biomedical Studies (with Foundation Year)
Intermediate Awards(s) and Title(s): There are 4 Intermediate awards for each pathway	Dip HE Biomedical Studies (with Foundation Year) BSc Biomedical Studies (with Foundation Year)
Course Code For each pathway and mode of delivery	
UCAS code For each pathway	

RQF Level for the Final Award:	Honours
Awarding Institution:	Kingston University
Teaching Institution:	Kingston University
Location:	Penrhyn Road
Language of Delivery:	English
Modes of Delivery:	Part-time Full-time
Available as:	
Minimum period of registration:	Part-time - 3 Full-time - 3
Maximum period of registration:	Part-time - 9 Full-time - 9
Entry Requirements:	The standard entry qualifications for the programme are:

	<p>From A levels: A minimum of 112 points from at least two science A-levels with Biology or Human Biology at Grade C plus at least one other science subject - Chemistry, Physics, Psychology or Maths</p> <p>BTEC: A minimum of 128 points for BTEC (Diploma under NQF or Extended Diploma under QCF);</p> <p>Access Diploma: Pass Science Access Course with a minimum of 60 credits 45 credits at Level 3 and 15 credits at Level 2, with minimum of 30 credits to include Biology and Chemistry specific subjects passed at Merit grade or above.</p> <p>Plus: Five GCSEs (A*-C, or comparable numeric score under newly reformed GCSE grading): which must include English Language, Mathematics and Double Science. (If not Double Science, then must have C in Biology and C in Chemistry)</p> <p>A minimum IELTS score of 6 overall, with no element below 5.5, or equivalent is required for those for whom English is not their first language.</p> <p>Criminal Records Bureau (CRB) clearance is required if you intend to work in NHS Laboratories.</p>
Programme Accredited by:	The Institute of Biomedical Science (IBMS)
QAA Subject Benchmark Statements:	QAA Biomedical Science 2023
Approved Variants:	There are no variants to the UR.
Is this Higher or Degree Apprenticeship course?	

For Higher or Degree 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

The main aims of the Biomedical Science field are:

- to provide all students with an in-depth knowledge and understanding of the core elements of biomedical analysis and an understanding of the operation and interactive nature of biomedicine;
- to enable students to identify, locate and critically appraise primary and secondary sources as a basis for independent study and to conduct a major research project in the final year;
- to develop extensive and varied subject-related practical skills and professional competence in the collection, analysis, interpretation and representation of samples/scientific data and information;
- to afford students with the opportunities to develop their written and oral communication skills;
- to prepare students for graduate employment, research, further study and lifelong learning (continued personal/professional development) by developing their intellectual, problem solving, practical and key (transferable) skills;
- to produce undergraduates with a knowledge and skills base that allows pursuit of both scientific and non-scientific careers in a variety of work environments, within and outside the health service.
- to convey an understanding and an awareness of organisational relationships within diagnostic pathology.
- to provides opportunities for students to gain valuable work experience through their Sandwich Year.

B. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced to the 'Guide to IBMS accredited undergraduate degree programmes in biomedical science' and the QAA subject benchmarks for the QAA subject benchmarks for Biomedical Science (2015) and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008), and relate to the typical student.

The specific requirements of programme content by the Institute of Biomedical Science (IBMS) includes relevant basic scientific core subjects, together with a study of the biomedical science specialist subjects, integrated through a study of the biology of disease. In addition, the programme incorporates an Honours project at level 6 (final year level) which is an essential component of the honours degree.

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 ['Sector Recognised Standards in England'](#) (OFS 2022).

Programme Learning Outcomes					
	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
A8	pursue further professional training and careers in both the life and medical sciences, and more broadly in industry and the public sector.	B5	demonstrate the ability to be independent, autonomous learners.	C6	develop an understanding of the analytical challenges particular to a submitted sample.
A7	underline the important role of epidemiology: the nature, formation, occurrence and distribution of disease and its relevance to biomedical analysis.	B4	assemble data from a variety of sources (including academic literature) and discern and establish connections;	C5	demonstrate skills in the evaluation and interpretation of scientific data;
A6	understand the need for compliance with health and safety policies, good laboratory practice, risk and COSHH assessments and the importance of quality control and quality assurance as defined by the IBMS.	B3	plan, conduct and report on an individual research project;	C4	be conversant with the detailed and strict requirements of facilities and procedures used in biomedical analysis;
A5	provide an accurate outline of the procedures of specimen collection and preservation with respect to subsequent tests and analysis;	B1	critically analyse and appraise information from both primary and secondary sources;	C3	use a range of complex instruments and understand their technological basis;
A3	provide a comparison and assessment of a variety of analytical methodologies and instrumentation with regard to performance and applicability;	B2	solve complex problems by use of appropriate learning technologies and management systems;	C2	select and use in an efficient manner the techniques used widely in the field of biomedicine;
A2	understand the importance of quality management systems, timeliness and accuracy in biomedical analysis;			C1	carry out subject-related practical work safely and understand ethical and safety issues, including implications of copyright and data protection, preparing completed

					CoSHH forms and conducting risk assessments and the correct handling of biological material;
A1	exhibit a good knowledge and understanding of the role of biomedical scientists and other health professionals in the investigation and diagnosis of disease;				
A4	outline the principles underpinning scientific research methodology;				

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

This programme is offered in full-time/part-time and sandwich mode, and leads to the award of BSc (Hons) Biomedical Science. Entry is normally at level 4 with A-level or equivalent qualifications (See section D). Transfer from a similar programme is possible at level 5 with passes in comparable level 4 modules and following an interview with the Biomedical Science Admissions Tutor or the Course Leader. Intake onto the Biomedical Science course is normally in September.

E1. Professional and Statutory Regulatory Bodies

Institute of Biomedical Science (IBMS).

E2. Work-based learning, including sandwich programmes

Work placements are actively encouraged – although it is the responsibility of individual students (with the assistance of the Placement Co-ordinator and Administrator) 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. Therefore, the biomedical science programme not only provides a strong underpinning in all the relevant disciplines required but also offers many opportunities for work-related and work-based learning designed to enhance students employability. Work placements, both integrated and sandwich, give students invaluable work experience in a role related to biomedicine, as well as the chance to put skills and knowledge into practice. These placements help develop the student's personal skills, enhance their CV, and contribute significantly to a successful final year. All placements are coordinated by a Placement Team (Placement Tutor, Administration, Employability and Careers Support) and involve the production of a learning agreement. Placements are supervised by a member of academic staff and all students on hospital and UK-based sandwich (4-year) placements are visited in the workplace. Additionally, the Course Leader for Biomedical Science provides assistance to a selected number of final year students in securing summer work experience in NHS hospitals. The process of selection for students on this option include being a student member of the IBMS, in line to obtain a first or upper second class degree classification, and an interview by a panel made up of course team members.

E3. Outline Programme Structure

Each level is made up of four modules each worth 30 credit. Typically a student must complete 120 credits at each level. All students will be provided with access to the University regulations and specific additions that are required for Professional Accreditation. Full details of each module will be provided in module descriptors and student module guides.

The course is designed to enable students to acquire and demonstrate core knowledge and understanding of the scientific discipline of biomedical science and sufficient knowledge in

related fields, as appropriate to QAA Biomedical Science Subject Benchmark Statements and the IBMS Specific Requirements of Programme Content.

1. BSc (Hons) Biomedical Studies
2. BSc (Hons) Biomedical Studies (with Professional Placement)
3. BSc (Hons) Biomedical Studies (with Foundation Year)

The above courses are closed courses, and only to be used for internal transfers.

Please note for the five clinical modules and the project you must achieve a pass grade (40%) on each element of assessment, Achieve this will result in students being transferred to the non IBMS accredited "Biomedical Studies" course program.

BSc (Hons) Biomedical Science

Level 4							
BSc (Hons) Biomedical Science							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Genes, Cells and Tissues	LS4001	30	4	1 & 2			
Human Physiology	LS4004	30	4	1 & 2			
Scientific and Laboratory Skills	LS4003	30	4	1 & 2			
The Biochemical Foundations of Life	LS4002	30	4	1 & 2			
Optional Modules							

Progression to Level 5

Progression to level 5 requires completion of all level 4 modules.

This course permits progression from level 4 to level 5 with 90 credits at level 4 or above, unless specific module prerequisites prevent trailing of credit. The outstanding 30 credits from level 4 can be trailed into level 5 and must be passed before progression to level 6.

Students exiting the programme at this point who have successfully completed 120 credits are eligible for the award of Certificate of Higher Education.

Level 5							
BSc (Hons) Biomedical Science							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Infection and Immunity	LS5008	30	5	1 & 2			
Medical Genetics	LS5023	30	5	1 & 2	None	1	2
Medical Physiology	LS5024	15	5	1 & 2	None	1	2
Pathobiology	LS5009	30	5	1 & 2			
Research Methods and Skills	LS5022	15	5	1 and 2		2	2

Optional Modules							
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Progression to Level 6

Progression to level 6 requires completion of the four core level 5 modules.

This course permits progression from level 5 to level 6 with 90 credits at level 5 or above, unless specific module prerequisites prevent trailing of credit. The outstanding 30 credits from level 5 can be trailed into level 6 and must be passed before consideration for an award

Students exiting the programme at this point who have successfully completed 120 credits are eligible for the award of Diploma of Higher Education.

Level 6							
BSc (Hons) Biomedical Science							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Clinical Applications of Biomedical Sciences	LS6007	30	6	1 & 2			
Clinical Chemistry and Haematology (Blood Sciences)	LS6005	30	6	1 & 2			
Clinical Immunology and Medical Microbiology	LS6006	30	6	1 & 2			
Project (Bioscience)	LS6014	30	6	1 & 2			
Optional Modules							

BSc (Hons) Biomedical Science (with Professional Placement)

Level 4							
BSc (Hons) Biomedical Science (with Professional Placement)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Genes, Cells and Tissues	LS4001	30	4	Year Long		1	1
Human Physiology	LS4004	30	4	Year Long		1	1
Scientific and Laboratory Skills	LS4003	30	4	Year Long		1	1
The Biochemical Foundations of Life	LS4002	30	4	Year Long		1	1
Optional Modules							

Progression to Level 5

Progression to level 5 requires completion of all level 4 modules.

This course permits progression from level 4 to level 5 with 90 credits at level 4 or above, unless specific module prerequisites prevent trailing of credit. The outstanding 30 credits from level 4 can be trailed into level 5 and must be passed before progression to level 6.

Students exiting the programme at this point who have successfully completed 120 credits are eligible for the award of Certificate of Higher Education.

Level 5							
BSc (Hons) Biomedical Science (with Professional Placement)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Infection and Immunity	LS5008	30	5	Year Long		2	3
Medical Genetics	LS5023	30	5	Year Long		2	3
Medical Physiology	LS5024	15	5	Year Long		2	3
Pathobiology	LS5009	30	5	Year Long		2	3
Research Methods and Skills	LS5022	15	5	Year Long		2	3
Sandwich Year Placement	LS5000	120	5	Year long		3	5
Optional Modules							

Progression to Level 6

Progression to level 6 requires completion of the four core level 5 modules.

This course permits progression from level 5 to level 6 with 90 credits at level 5 or above, unless specific module prerequisites prevent trailing of credit. The outstanding 30 credits from level 5 can be trailed into level 6 and must be passed before consideration for an award

Students exiting the programme at this point who have successfully completed 120 credits are eligible for the award of Diploma of Higher Education.

Level 6							
BSc (Hons) Biomedical Science (with Professional Placement)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Clinical Applications of Biomedical Sciences	LS6007	30	6	Year long		3	5
Clinical Chemistry and Haematology (Blood Sciences)	LS6005	30	6	Year long		3	5
Clinical Immunology and Medical Microbiology	LS6006	30	6	Year long		3	5
Project (Bioscience)	LS6014	30	6	Year long		3	5
Optional Modules							

BSc (Hons) Biomedical Science (with Foundation Year)

Level 4							
BSc (Hons) Biomedical Science (with Foundation Year)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Genes, Cells and Tissues	LS4001	30	4	Year long		1	1
Human Physiology	LS4004	30	4	Year long		1	1
Human Physiology	LS4004	30	4	Year long		1	1
Scientific and Laboratory Skills	LS4003	30	4	Year long		1	1
Optional Modules							

Level 5							
BSc (Hons) Biomedical Science (with Foundation Year)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Infection and Immunity	LS5008	30	5	Year long		2	3
Medical Genetics	LS5023	30	5	Year long		2	3
Medical Physiology	LS5024	15	5	Year long		2	3
Pathobiology	LS5009	30	5	Year long		2	3
Research Methods and Skills	LS5022	15	5	Year long		2	3
Optional Modules							

Level 6							
BSc (Hons) Biomedical Science (with Foundation Year)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Clinical Applications of Biomedical Sciences	LS6007	30	6	Year long		3	5
Clinical Chemistry and Haematology (Blood Sciences)	LS6005	30	6	Year long		3	5
Clinical Immunology and Medical Microbiology	LS6006	30	6	Year long		3	5
Project (Bioscience)	LS6014	30	6	Year long		3	5

Optional Modules							
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BSc (Hons) Biomedical Studies

Level 4							
BSc (Hons) Biomedical Studies							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Genes, Cells and Tissues	LS4001	30	4	Year long		1	1
Human Physiology	LS4004	30	4	Year long		1	1
Scientific and Laboratory Skills	LS4003	30	4	Year long		1	1
The Biochemical Foundations of Life	LS4002	30	4	Year long		1	1
Optional Modules							

Level 5							
BSc (Hons) Biomedical Studies							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Infection and Immunity	LS5008	30	5	Year long		2	3
Medical Genetics	LS5023	30	5	Year long		2	3
Medical Physiology	LS5024	15	5	Year long		2	3
Pathobiology	LS5009	30	5	Year long		2	3
Research Methods and Skills	LS5022	15	5	Year long		2	3
Optional Modules							

Level 6							
BSc (Hons) Biomedical Studies							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Clinical Applications of Biomedical Sciences	LS6007	30	6	Year long		3	5
Clinical Chemistry and Haematology (Blood Sciences)	LS6005	30	6	Year long		3	5
Clinical Immunology and Medical Microbiology	LS6006	30	6	Year long		3	5

Project (Bioscience)	LS6014	30	6	Year long		3	5
Optional Modules							

BSc (Hons) Biomedical Studies (with Professional Placement)

Level 4							
BSc (Hons) Biomedical Studies (with Professional Placement)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Genes, Cells and Tissues	LS4001	30	4	Year long		1	1
Human Physiology	LS4004	30	4	Year long		1	1
Scientific and Laboratory Skills	LS4003	30	4	Year long		1	1
The Biochemical Foundations of Life	LS4002	30	4	Year long		1	1
Optional Modules							

Level 5							
BSc (Hons) Biomedical Studies (with Professional Placement)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Infection and Immunity	LS5008	30	5	Year long		2	3
Medical Genetics	LS5023	30	5	Year long		2	3
Medical Physiology	LS5024	15	5	Year long		2	3
Pathobiology	LS5009	30	5	Year long		2	3
Research Methods and Skills	LS5022	15	5	Year long		2	3
Sandwich Year Placement	LS5000	120	5	Year Long		3	5
Optional Modules							

Level 6							
BSc (Hons) Biomedical Studies (with Professional Placement)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Clinical Applications of Biomedical Sciences	LS6007	30	6	Year long		3	5
Clinical Chemistry and Haematology (Blood Sciences)	LS6005	30	6	Year long		3	5

Clinical Immunology and Medical Microbiology	LS6006	30	6	Year long		3	5
Project (Bioscience)	LS6014	30	6	Year long		3	5
Optional Modules							

BSc (Hons) Biomedical Studies (with Foundation Year)

Level 4							
BSc (Hons) Biomedical Studies (with Foundation Year)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Genes, Cells and Tissues	LS4001	30	4	Year long		1	1
Human Physiology	LS4004	30	4	Year long		1	1
Scientific and Laboratory Skills	LS4003	30	4	Year long		1	1
The Biochemical Foundations of Life	LS4002	30	4	Year long		1	1
Optional Modules							

Level 5							
BSc (Hons) Biomedical Studies (with Foundation Year)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Infection and Immunity	LS5008	30	5	Year long		2	3
Medical Genetics	LS5023	30	5	Year long		2	3
Medical Physiology	LS5024	15	5	Year long		2	3
Pathobiology	LS5009	30	5	Year long		2	3
Research Methods and Skills	LS5022	15	5	Year long		2	3
Optional Modules							

Level 6							
BSc (Hons) Biomedical Studies (with Foundation Year)							
Core modules	Module code	Credit Value	Level	Teaching Block	Pre-requisites	Full Time	Part Time
Clinical Applications of Biomedical Sciences	LS6007	30	6	Year long		3	5

Clinical Chemistry and Haematology (Blood Sciences)	LS600 5	30	6	Year long		3	5
Clinical Immunology and Medical Microbiology	LS600 6	30	6	Year long		3	5
Project (Bioscience)	LS601 4	30	6	Year long		3	5
Optional Modules							

D. Principles of Teaching, Learning and Assessment

The Biomedical Science course at Kingston University is designed to equip our students with the knowledge and skills base required for life-long learning in one of the most exciting and rapidly expanding areas of modern science. To facilitate this, the course team provides a range of learning and teaching strategies and experiences for our students.

The range of learning and teaching strategies includes:

- **formal lectures:** are essentially given in large groups and introduce students to new topics to provide direction and inspiration for private study. Some modules relies heavily on case studies and case histories as the basis for introducing important concepts and also for integration and reflection of material learnt at lower levels in the course.
- **practical and laboratory sessions:** are generally given to smaller group sizes and are designed to allow students to see how some of the principles introduced in lectures can be observed in living organisms. This type of class also provides the opportunity to develop technical skills and since they are assessed, receive formative feedback on academic progress. These sessions sometimes include demonstrations of equipment and techniques relevant to the course aims and objectives.
- **critical reviews of scientific papers/journal articles:** biomedical research or advanced scholarship, and critically evaluate arguments, assumptions etc. to make judgements
- **Tutorials, seminars and workshops:** provides help to engage students with the learning process, by the formation of small groups to problem solve and disseminate information to the rest of the class.
- **e-Learning:** the main resources to support lectures and tutorials are provided through a Virtual Learning Environment called StudySpace/My Kingston, which uses a range of e-learning experiences including interactive group workshops and podcasts.
- blended learning.
- **work-related Learning:** Between second and final year students are given the opportunity to pursue a year's placement in a research laboratory in the UK or other approved laboratories, providing significant learning and employability enhancement opportunities.
- **supervised Projects:** a supervised research project on a topic of the student's choice is an integral part of their final year. This makes a significant contribution to the final honours degree classification and provides valuable skills and insight into the world of academic research.
- **self-Directed Study:** Students are expected and in some cases signposted to undertake private reading, engagement with e-learning resources, reflection on feedback and assignment research or preparation work for lectures, practical, presentations and other such module activities.

- personal Tutors:** All students are assigned a Personal Tutor who can advise essentially on academic but also on personal matters. An important strand of the Personal Tutor Scheme (PTS) is the embedding of tutor/tutee meetings and other activities in a number of modules in level 4 (LS4003), level 5 (LS5005) and level 6 (LS6007). These are all synoptic modules in nature (i.e., they are comprehensive, drawing content and skills from across a range of module disciplines from within the Biomedical Science programme. As such students will meet with personal tutors periodically to discuss their personal and academic development, with particular emphasis on planning for careers within the Biomedical Science field. Final year students will also be assigned a project supervisor who will provide help, support and guidance for and throughout their final year project. Students pursuing laboratory based projects will also gain additional experiences with research teams in a working laboratory setting.

The course's main focus is to lay the foundation for the development of future careers in biomedical sciences and also further studies and/or research within continuing education by utilising a wide range of teaching and learning strategies and methods that will enable all students to be actively engaged throughout the course. These learning strategies are closely linked to the learning outcomes of the modules and they provide students with the opportunity to develop an investigative, independent and individualised approach to learning.

A key focus of the course is to ensure that students learn actively and effectively through a formal teacher-centred approach, group based seminars and discussion, practical and laboratory sessions or individual study. Students are given the opportunity throughout the course to develop their individual interests and personal and key skills/transferrable skills.

Strategies at level 4 of the field are designed to ensure that all students are thoroughly equipped with the essential scientific content before progressing to level 5. Consequently, lectures and practical classes form the main approach, and they are supported by tutorials and guidance on independent learning. Students are also encouraged to reflect on their learning, progress and preparation for the various career options available to graduates with a biomedical science degree. This is facilitated throughout the course in meetings with the course team and the personal tutor during tutors/tutee meetings. Additionally, throughout the course, emphasis is placed on developing self awareness skills, communication skills, interpersonal skills, research and information literacy skills, numeracy skills, management and leadership skills and problem solving skills. The Biomedical Science course also incorporates laboratory-based practical classes as important components and all students gain extensive experience of working in laboratories in most of their module.

A range of assessment methods are used throughout the course that enables students to demonstrate the acquisition of knowledge and skills. Assessment methods include coursework, oral presentations, in-class tests, MCQs, critical reviews, formal examinations, laboratory reports and poster presentations. The assessment approach for each module is such that it provides formative opportunities that allow students to carry out effective revision and practice and to receive feed forward on their performance in preparation for the summative assessment. Students are supported by their allocated personal tutors at levels 5 and 6 to draw together the themes of the curriculum enabling them to design their own reflection model to demonstrate achievement of a range of learning outcomes from across a number of modules.

The course strategies at levels 5 and 6 therefore enable students to develop independence of learning and an increasing emphasis on critical evaluation of information. This culminates in the final year project in which the student investigates and reports on a specific area of research relevant to the biomedical science field. The academic knowledge and skills developed by students throughout the course are assessed both by formative and summative methods.

The course team will employ a range of diagnostic testing approaches in the early stages of the course and also at intervals throughout the course to test progress in the development of these skills. This will provide early markers to identify if students may need additional support from tutors or from the Academic Skills Centre or indeed other tailored university support networks.

E. Support for Students and their Learning

- **A Module Leader** for each module: will make sure that assignment guidelines and grading criteria are clearly communicated to students. Additionally, remind students of resources available for help throughout the semester/academic year.
- **A Course Leader** to help students understand the programme structure: also, in addition to the help offered through the course or School of Life Sciences (LS)-- for example, office hours, study sessions, and personal tutor sessions. The course leader should remind students of resources beyond the course, such as campus services for students with disabilities, or resources for non-native English speakers (Kingston Language Scheme) that might be available. The course leader can support student success by acknowledging the importance of these resources, and letting students know there is no stigma attached to getting extra help.
- **Personal Tutors Scheme (PTS)** – personal Tutors provide academic and personal support to students and allows them to meet with their personal tutors periodically to discuss their personal and academic development, with particular emphasis on planning for careers within the Biomedical Science field. They provide students with a point of contact should they need advice and inform students of the procedures necessary to get help. In most circumstances, students will have the same person acting as their year tutor throughout their time on the Biomedical Science degree course at Kingston.
- **A placement tutor** to give general advice on placements:
- Technical support to advise students on IT and the use of software
- **A designated programme administrator:** support the day-to-day delivery and administration of the biomedical science programme within the School of Life Sciences. The administrator is part of a programme administration team supporting UG students and programmes in the school.
- **An induction/welcome week** at the beginning of each new academic session particularly for new students to the course.
- **Staff Student Consultative Committee:**
- **StudySpace** – a versatile on-line interactive intranet and learning environment
- **A substantial Study Skills Centre:** that provides academic skills support
- **Student support facilities:** (Student Centre, Disabled student support, The Students' Union, Careers and Employability Service, Student Finance, International Office, and Student Accommodation) that provide advice on issues such as finance, regulations, legal matters, accommodation, international student support etc.

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
- Boards of study with student representation
- Annual review and development
- Periodic review undertaken at the subject level
- Student evaluation

- Moderation policies

G. Employability and work-based learning

This course is designed to fulfil the core curriculum requirements of the Institute of Biomedical Science (IBMS) with the programme learning outcomes benchmarked to the QAA for Higher Education Biosciences subject area statement 2023. This ensures the content of the curriculum and the knowledge and skills that it develops are appropriate particularly to NHS pathology laboratories and also private approved laboratories. Generally, students' generic employability skills are developed throughout their course, both through activities that are embedded within the syllabus and from services offered by the University's Careers and Employability Service. Students are encouraged from the first year to reflect on and identify what they have learned, whether academically or in terms of transferable skills, and how these may be relevant to employment. They are also encouraged to explore the job market and possible career paths, and to consider attributes that employers look for in graduates above and beyond essential academic skills, such as initiative, the ability to work in teams, manage time and to prioritise, the desire to learn and the motivation to improve performance, and appropriate communication and presentation skills in all forms. This articulation is achieved in the Biomedical Science Programme through our synoptic modules (LS4003 & LS4004, LS5005 & LS5009, and LS6007) and Capstone projects (LS6014). Our synoptic modules are designed based on student-centred learning and they provide a link between the knowledge and skills gained during academic study and the world of work by incorporating input from local employers in the delivery of the course. The capstone project requires students to apply the methods and techniques that they have learned in the synoptic and other modules throughout their Biomedical Science course to review, consolidate, extend and apply their knowledge and understanding, in order to initiate and carry out their projects; critically evaluate arguments, assumptions, abstract concepts and data, to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem. It also provides students with the tool to communicate information, ideas, problems, and solutions to both specialist and non-specialist audiences through their final year project presentation.

In this context, students are also encouraged to take advantage of opportunities within and outside of the university to develop such skills through volunteering, work placements and study abroad. These skills are developed and enhanced during the second and third years; in particular, the importance of creative thinking and problem-solving, networking, negotiating, inquisitiveness and giving and receiving feedback. Students are also encouraged to develop clearer ideas about career options, and are offered assistance and guidance in the preparation of CVs and for job applications and interviews. The final year also develops an understanding of leadership skills as well as an appreciation of commercial and business awareness, among other essential employment skills.

The degree in Biomedical Science has a very high currency and apart from NHS pathology and private laboratories, graduates of the fields can obtain employment in a wide range of other careers. These include medical product development; quality assurance and sales; product development and testing in the biomedical and pharmaceutical industry; biomedical and health-related research; clinical trials; diagnostic laboratories; other biological and health care organisations, and teaching. Therefore, in addition to the generic employability skills, biomedical science students are exposed to some of the professional requirements of the IBMS and the HCPC throughout their course. The IBMS registration portfolio provides the basis for this as it contains evidence that an applicant to the NHS has to complete in order to gain the practical training required for the Certificate of Competence, which is necessary to apply for HCPC registration.

Students are taught that the portfolio is a collaborative process between the trainee and the laboratory training officer whose responsibility it is to ensure that the delivery of training, assessment of competence and verification of knowledge and skill against each individual

standard is signed off. Students are also encouraged to secure the scripts of their course assignments as most of these are normally required as evidence for the portfolio. Students are encouraged and supported in seeking relevant summer laboratory placements that will enable them to not only practice their subject specific skills and develop their employability skills, but also enhance their opportunity for obtaining a full time post.

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

n/a

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

See subject benchmark for Biomedical science:

http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-biomedical-sciences-15.pdf?sfvrsn=3deef781_18

Professional, Career and educational information from The Institute of Biomedical Science (IBMS) can be found at: <http://www.ibms.org/>

Kingston University website

<http://www.kingston.ac.uk/undergraduate-course/biomedical-science-bsc-2013/>

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 4				Level 5						Level 6			
	LS4004	LS4003	LS4002	LS4001	LS5022	LS5000	LS5023	LS5024	LS5009	LS5008	LS6005	LS6006	LS6014	LS6007
Knowledge & Understanding	A8													
	A7						S		S	S		S		S
	A6	S	S				S	S	S	S	S	S	S	
	A5		S	S							S	S	S	S
	A3						S	S	S	S	S	S	S	S

	A2									S	S	S	S	S	S
	A1	S		S				S	S	S	S	S	S	S	S
	A4		S					S	S			S	S	S	S
Intellectual Skills	B5													S	
	B4		S	S					S	S	S	S	S	S	S
	B3	S	S							S	S	S	S	S	S
	B1	S	S	S					S	S		S	S	S	S
	B2	S	S	S						S	S	S	S	S	S
Practical Skills	C6														
	C5											S		S	
	C4			S							S	S	S	S	S
	C3	S	S	S							S	S	S	S	S
	C2							S	S	S		S	S		S
	C1		S	S				S	S	S	S	S	S	S	S

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