Template C4

Kingston University London

Programme Specification

Title of Course: *MSc Cancer Biology*

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Version number	3
Faculty	Faculty of Health, Science, Social Care & Education
School	School of Life Sciences, Pharmacy and Chemistry
Department	Department of Applied & Human 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 modules can be found in the course VLE site and in individual Module Descriptors.

SECTION 1: GENERAL INFORMATION

Award(s) and Title(s): ***Up to 10 pathways***	MSc Cancer Biology
Intermediate Awards(s) and Title(s): ***There are 4 Intermediate awards for each pathway***	Postgraduate Certificate in Cancer Biology Postgraduate Diploma in Cancer Biology
Course Code ***For each pathway and mode of delivery***	
UCAS code ***For each pathway***	N/A

RQF Level for the Final Award:	7
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 - 2 Full-time - 1
Maximum period of registration:	Part-time - 4 Full-time - 2
Entry Requirements:	The minimum entry qualifications for the programme are: A good second class honours degree in a human biology related discipline, containing a significant component of immunology and subjects relevant to the chosen specialist route. Applicants with qualifications that do not meet these requirements, but with significant professional experience, may also be considered. A minimum IELTS score of 6.5, with 6.0 in Writing and no sections less than 5.5 (or equivalent) is required for those for whom English is not their first language.
Programme Accredited by:	IBMS
QAA Subject Benchmark Statements:	N/A

Approved Variants:	None
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 aims of the MSc Cancer Biology programme are;

- to develop and extend students' knowledge of topics in cancer biology beyond an honours degree level.
- to produce graduates with a knowledge and skills base that allows pursuit of lifelong learning and careers in a wide variety of work environments. to encourage students to develop an informed, reflective and critically analytical approach to the subject of cancer biology Biomedical Science.
- to provide an education in the theoretical and applied aspects of pathology at cellular and systemic levels, and to convey an understanding of the principles of cancer diagnosis and monitoring and of the biological basis of different cancer treatment modalities.
- to provide a theoretical background to factors governing the design, selection and interpretation of laboratory investigative techniques and treatment strategies in haematological malignancies and solid cancers.
- to further 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 an independent research project related to cancer biology, and to communicate results in a variety of formats.

B. Intended Learning Outcomes

The field/course provides opportunities for students to develop and demonstrate knowledge and understanding specific to the subject, key skills and graduate attributes in the following areas. 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 (2008), 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 'Sector Recognised Standards in England' (OFS 2022).

Programme Learning Outcomes					
	Knowledge and Understanding On completion of the course students will be able to:		**Intellectual Skills** On completion of the course students will be able to		**Subject Practical Skills** On completion of the course students will be able to
A10	the statistical and computing techniques required to assess and present their own data	B8	present their own research in a clear and concise fashion in writing and in scientific presentations	C4	demonstrate new and/or improved practical skills and apply them in a research setting
A9	the ethical implications of scientific research in the field of cancer	B7	to critically evaluate their own findings as well as those of others	C3	demonstrate skills in the evaluation, presentation and interpretation of laboratory data
A8	the principles of objective scientific research	B6	have the ability to apply independent judgement and original thought in a variety of contexts relevant to Cancer Biology	C2	demonstrate competence in a range of practical and analytical techniques appropriate to Cancer Science
A7	the methologies and clinical rationale of diagnosis and therapy of different solid cancers and haematological malignancies	B5	use their generic intellectual and key skills in their lifelong learning and future employment	C1	understand, and be able to comply with, safety in the laboratory
A5	the role of the pathology laboratory within the wider context of health care	B4	assemble, interpret and critically evaluate information and data from a variety of sources (including academic literature)	C5	apply their subject specific knowledge to the planning, design and delivery of an experimental research project
A4	the principles and applications of a range of molecular techniques relevant to Cancer Biology	B3	apply subject knowledge and understanding to the solving of problems in Cancer Biology		
A3	the biological basis of disease	B1	demonstrate the ability to learn independently		
A2	the principles of constructive criticism in Cancer Science	B2	undertake the analysis and interpretation of experimental data		
A1	the principles and practice of a variety of topics in Cancer Biology				

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				

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

The academic year is made up of four modules each worth 30 credit points and a summer research project module worth 60 credit points. All students will be provided with the University regulations. Full details of each module will be provided in module descriptors and student module guides.

MSc Cancer Biology

Level 7							
MSc Cancer Biology							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Cancer Diagnosis and Therapy	LS7007	30	7	1 and 2			
Cellular and Molecular Biology of Cancer	LS7008	30	7	1 and 2			
Immunology and the Biology of Disease	LS7002	30	7	1 and 2			
Research Project	LS7010	60	7	-			
Research Techniques & Scientific Communication	LS7001	30	7	1 and 2			
Optional Modules							

D. Principles of Teaching, Learning and Assessment

Keeping in view the varied academic background of the students doing the MSc in Cancer Biology, teaching and assessment on this programme is designed to ensure that can 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 applied "real world learning" (such 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. These have been utilised within the teaching, learning and assessment regimes for the course as follows:

- Assessment for learning designed at course level with opportunities for feedback and 'feedforward' explicitly specified at the design stage
    - All Assessments have been designed at level 7, as appropriate for the MSc, and in a manner that encourages students to link each assessment with intended learning outcomes. For example, in LS7007 (Cancer Diagnosis and Therapy), students are offered a formative assessment in the form of a short report on a diagnostic technique or treatment modality for a particular type of cancer. This formative assessment precedes the summative assessment of a case study on diagnosis, staging and treatment of cancer.
    - Students will have feedback available for all assessments; including generic and specific feedback to individual students.
    - 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 consider needs completion

- Research-led and research informed teaching with increased opportunities for undergraduate research and capstone projects
    - 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
    - Each student is assigned a personal tutor.
    - Module content includes the opportunity for students to personalize the content of their assignments and topics being explored.
- An embedded employability curriculum at discipline level featuring credited placement/internship opportunities for all students and explicit links to the co-curriculum;
    - Employability skills are embedded into several modules, including 'applying for funding' (LS7001), and 'industry specific recruitment information' (e.g. from external expert practitioner lecturers). Communication skills ('presenting your published work) are emphasized in all modules in a variety of media, including written and oral presentation.
    - 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 Science, Engineering, and Computing 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 electronic learning management system (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 SEC Study Skills (S_3), 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 Director/personal tutor, and all academic staff operates a system of Office Hours during which students can consult their lecturers. In addition the Faculty employs Student Support Officers who are available in both drop-in and appointment sessions 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 (3-4 students), 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 Course Director/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 Module Leader for each module
- A Course Leader to help students understand the programme structure, who also acts as Personal Tutor to provide academic and personal support
- 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
- Staff Student Consultative Committee
- Canvas – a versatile on-line interactive intranet and learning environment
- A substantial Study Skills 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
- The Students' Union
- 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
- Boards of study with student representation
- Annual review and development
- Periodic review undertaken at subject level
- Student evaluation
- Moderation policies

G. Employability and work-based learning

This programme has been designed to meet the requirements of a Master's level qualification and as such prepares students for a career in hospital-based cancer laboratories, research institutions and for a PhD in oncology.
Current employers are involved in the delivery of the programme, and ensure that the content of the programme, and the knowledge and skills students acquire, are appropriate to workplace requirements.
Emphasis is also placed on the transferability of these skills, and graduates of this programme have taken up posts in a variety of employment settings including the NHS, commercial and research laboratories. Some students continue with their studies, and the programme 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 programme 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.
Placements in commercial, research and NHS laboratories are also available for some students when carrying out their Research Projects. Care is taken to involve students in the

day-to-day work of these laboratories, allowing students to gain an understanding of how important ‘employability skills’ are in a ‘real-world’ situation.

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

Programme information on the University website
http://www.kingston.ac.uk/postgraduate-course/biomedical-science-msc/

The Faculty of Science, Engineering and Computing
http://sec.kingston.ac.uk/

The School of Life Sciences
http://sec.kingston.ac.uk/about-SEC/schools/life-science/

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				
		LS7010	LS7008	LS7007	LS7002	LS7001
Knowledge & Understanding	A10	S	S	S		
	A9	S				
	A8	S				
	A7	S		S		
	A5			S		
	A4		S			
	A3		S	S	S	
	A2	S	S	S		
	A1	S	S		S	
	A6		S		S	
Intellectual Skills	B8	S				
	B7	S	S		S	
	B6	S			S	
	B5	S	S	S	S	

	B4	S		S	S	
	B3	S	S		S	
	B1	S	S	S	S	
	B2	S	S	S	S	
Practical Skills	C4	S	S	S		
	C3	S	S	S	S	
	C2	S	S		S	
	C1	S	S	S	S	
	C5	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.