Programme Specification

A	NATURE OF THE AWARD	
1	Programme Title	Biomedical Sciences
2	Final award	MRes
3	Intermediate awards	PG Certificate (exit award only)
4	Awarding institution/body	University of London
5	Teaching institution	St George's, University of London (SGUL)
6	Programme accredited by	N/A
7	UCAS/JACS code	N/A
8	QAA benchmark statements	N/A
9	Date specification produced	April 2007

B	FEATURES OF THE PROGRAMME	
1	Mode of study	Full-time only
2	Usual length of programme	One calendar year
3	Other features of the programme	Substantial research project makes up 58% of the course. One entry per year in October.

C	EDUCATIONAL AIMS OF THE PROGRAMME

Students will be able to:

- plan and manage a research project and understand the need for ethical and other approvals before commencing research;
- write a research proposal;
- critically analyse the characteristics of good research;
- critically evaluate the design, methods, analyses and conclusions of published research;
- demonstrate in depth knowledge of a specialised area of current biomedical research;
- apply the content of taught modules to the practical investigation of a biomedical, biological or medical research problem.

D	LEARNING OUTCOMES OF THE PROGRAMME	
	Advanced knowledge and understanding of:	*Related teaching and learning methods and strategies*
1	Research methods and statistics relevant to biomedical sciences	

2	Current research techniques and findings related to at least one biomedical topic in depth depending on the pathway chosen	Lectures, small group work, practical sessions, independent study
3	Critical appraisal techniques applied to published research	*Assessment* Research protocol Literature reviews/essays Critique of papers Statistics examination Poster Dissertation
4	Research governance, funding and regulation within UK biomedical science areas	

	Cognitive skills: the ability to	*Related teaching and learning methods and strategies* Lectures, small group work, practical sessions, independent study, research supervisions
1	Pursue the study of a biomedical topic independently seeking appropriate advice where necessary	
2	Argue with confidence from an identified evidence base	
3	Use appropriate techniques to analyse statistically data generated by research	*Assessment* Research protocol Literature reviews/essays Oral presentations Statistics examination Poster Dissertation
4	Understand and evaluate a range of approaches to research and critically appraise published research	
5	Use appropriate research techniques to investigate biomedical research problems	
6	Formulate a research question, carry out research and write up a project under supervision	

	Practical skills: the ability to	*Related teaching and learning methods and strategies* Lectures, practicals, laboratory work, self-directed study
1	Conduct literature searches using a variety of print and electronic media and reference academic work appropriately	
2	Use a range of computer packages including word-processing, graphics, spreadsheets, statistical analysis applications, internet search engines and databases	
3	Use a range of practical research techniques	*Assessment* Course work Poster Presentations Dissertation
4	Follow a research protocol and find and adapt published research protocols to meet research needs	
5	Use appropriate visual aids to illustrate an oral presentation and a poster	

	Transferable skills: the ability to	*Related teaching and learning methods and strategies* Lectures, small group work, practical sessions, independent study, computer laboratory sessions, research work
1	Communication: (a)contribute orally to group work and discussion; (b) give a prepared presentation (c) present written work to an appropriate standard	
2	Data handling: (a) collect and analyse data from primary sources (b) collect, evaluate and analyse data from secondary sources	
3	IT use appropriate packages to (a) generate visual aids in presentations; (b) undertake statistical analyses; (c) present written work; (d) present work in graphical/ diagrammatic form; (e) retrieve literature from appropriate databases and search engines.	*Assessment* Research protocol Statistics examination Oral presentations Literature reviews/essays Dissertation
4	Team-working: (a) work in groups on practical exercises and discussions; (b) work within a research team	

5	Independent learning: take responsibility for (a) the design and conduct of a research project; (b) acquiring the necessary IT and communication skills to meet the learning objectives of the course; (c) acquiring the necessary practical skills to carry out the research project; (d) working independently on assignments; (e) using information provided on the course to pursue the study of specific topics in depth.	

E	**Programme structure and features**
The programme includes a core of modules designed to support the research process: Research Methods (15 credits), Critical Appraisal (15 credits), Statistics (15 credits), Research Project Planning and Management (15 credits). Students will also choose one taught specialist module from the following: Human Genetics, Cell Signalling in Health and Disease, Cellular and Molecular Aspects of Infectious Disease, Applied Research in Rehabilitation, Cardiac and Vascular Sciences, Reproductive Science and Medicine each worth 15 credits. The remainder of the degree will be made up of a research project carried out throughout the year. Students will be expected to undertake a project related to the specialist module they have chosen.	
'The description of the structure of the programme, including the lists of modules, is indicative and should not be regarded as full and definitive. For up-to-date information, see the course handbook'.	
Programme reference points – the following reference points were used in the preparation of this specification: HEQF	

F	**General teaching and learning strategies**
The core and pathway modules will be taught using a mixture of lectures, small group work, and practical sessions. Students will be allocated an individual supervisor for the research project and will work under close supervision on a topic approved in a research protocol submitted as the assessment for the Research Methods module. They will normally be expected to develop laboratory skills as part of this process and to work within a research team. Seminars will support the planning and management of the project and skills developed in the Statistics and Critical Appraisal module will be used in the writing up process.	

G	**Assessment**
There will be assessments for each of the core modules. For Research Methods this will be a research protocol for the proposed research project. For Statistics there will be a formal written examination in which students are asked to apply statistical concepts to a set of data. For Research Project Planning and Management there will be a presentation in which students outline the shape and key messages of the dissertation (50%) and a report on	

the implications of the work (50%). For Critical Appraisal, students will undertake an appraisal of two published papers using contrasting methods. Assignments will be set for each of the pathway modules as outlined in the module handbooks. These may include presentations or literature reviews exploring the current state of knowledge in the subject area. These taught module assessments make up 75 credits. The remaining 105 credits will be allocated to the research project which is assessed by a poster, an oral presentation and a dissertation which forms the written report of the research undertaken during the year. This will be 15,000-25,000 words and will be submitted at the end of the year. Students may be required to attend an oral examination if their performance is borderline for a mark of distinction.

H	Support for students and their learning

Students will be allocated an individual supervisor for the research project at the outset of the course. They will also be able to refer to module leaders for academic support on the core and pathway modules. Small groups will be facilitated by academic staff with expertise in relevant subjects who will also provide a source of support. The Course Director will provide support for any students experiencing academic difficulties. Students will have access to support from the Student Union, Counselling Service and Registry for any personal or financial problems which they may experience during the course.

I	Criteria for admissions

Applicants should have a first degree in a relevant subject classified as at least at 2(ii) standard (or an equivalent overseas qualification). This degree should normally have been obtained within the last five years. For qualifications obtained longer than five years before admissions, applicants will be expected to show evidence of recent academic study in an appropriate subject area. All candidates will normally be expected to attend an interview.

J	Career opportunities

The course will provide focused training and experience in biomedical research. Qualified students may be able to proceed to a PhD or to jobs within the biomedical science area with a research orientation. These may include posts in academic biomedical science faculties, research assistant posts, or jobs within the pharmaceutical or biomedical science industry which have a research focus.

K	Methods for evaluating and improving the quality and standards of teaching and learning

Students will be asked to evaluate each core and specialist module and this information will be considered termly by the Course Committee. Informal feedback from students will also be welcomed. Academic staff teaching on the course will take part in SGUL's peer review scheme and will receive feedback on their teaching. Visiting examiners will review student work and will advise the Board of Examiners on the appropriateness of the standards being

achieved. An annual report on the course will be prepared by the Course Director with advice from the Course Committee and will be reviewed by the Taught Postgraduate Courses Committee.

L	Regulation of assessment

A scheme of assessment will be prepared by the Course Committee and will be reviewed each year by the Board of Examiners. Assignment guidelines will be set out in module handbooks and students will be given marking criteria where appropriate. Regulations for the programme of study will be approved by Senate and will include regulations relating to assessment.

M	Indicators of quality and standards

Visiting examiners will be asked to prepare a report on the quality of the assessments process and standards of student work each year.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the course handbook and, where they are produced, separate module guides.

Key sources of information are:
Course documents
Student Handbook
The St George's University of London prospectus and the Kingston University prospectus
Course leaflets
The St George's University of London internet site and the Kingston University internet site
General Regulations for students and programmes of study
QAA subject review reports