



St George's, University of London Programme Specification

| A NATURE OF THE AWARD | | |
|------------------------------|-----------------------------|--|
| 1 | Programme Title | Biomedical Sciences |
| 2 | Final award | MRes |
| 3 | Intermediate awards | PG Certificate (exit qualification only) |
| 4 | Awarding institution/body | University of London |
| 5 | Teaching institution | St George's, University of London |
| 6 | Programme accredited by | N/A |
| 7 | UCAS/JACS code | B120 |
| 8 | QAA benchmark statements | N/A |
| 9 | Date specification produced | Revised April 2022 |

| B FEATURES OF THE PROGRAMME | | |
|------------------------------------|---------------------------------|--|
| 1 | Mode of study | Full time only |
| 2 | Usual length of programme | 1 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 | | |
|--|--|--|
| <p>Students will be able to:</p> <ul style="list-style-type: none"> • 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 | | |
|---|--|---|
| | <i>Advanced knowledge and understanding of:</i> | <i>Related teaching and learning methods and strategies</i> |
| 1 | Research methods and statistics relevant to biomedical sciences | Lectures, small group work, practical sessions, independent study, reading, staff feedback and supervision |
| 2 | Current research techniques and findings related to at least one biomedical topic in depth depending on the pathway chosen | |
| 3 | Critical appraisal techniques applied to published research | <i>Assessment</i> |
| 4 | Research governance, funding and regulation within UK biomedical science areas | Research protocol Literature reviews/essays Critique of papers Statistics examination Poster presentation Dissertation |

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

| | | |
|---|--|--|
| | <i>Practical skills: the ability to</i> | <i>Related teaching and learning methods and strategies</i> |
| 1 | Conduct literature searches using a variety of print and electronic media and reference academic work appropriately | Lectures, laboratory work, self-directed study |
| 2 | Use a range of computer packages including word-processing, graphics, spreadsheets, statistical analysis applications, internet search engines and databases | <i>Assessment</i> |
| 3 | Use a range of practical research techniques | Course work Oral presentations Poster presentation 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 | |

| | <i>Transferable skills: the ability to</i> | <i>Related teaching and learning methods and strategies</i> |
|---|---|---|
| 1 | <u>Communication</u> <ul style="list-style-type: none"> • Contribute orally to group work and discussion • Give a prepared presentation • Present written work to an appropriate standard | Lectures, small group work, independent study, IT sessions, research work, assignment preparation, presentations, dissertation preparation. |
| 2 | <u>Data handling</u> <ul style="list-style-type: none"> • Collect, analyse and interpret data from primary sources • Collect, evaluate, analyse and interpret data from secondary sources | |
| 3 | <u>Information technology</u> <ul style="list-style-type: none"> • Use appropriate computer packages to generate visual aids in presentations • Use appropriate computer packages for analysing and presenting statistical data • Use appropriate computer packages for presenting written work • Use appropriate computer packages to present work in appropriate graphical/diagrammatic form • Use appropriate databases and search engines to retrieve literature | <i>Assessment</i> Research protocol Statistics examination Oral presentations Literature reviews/essays Dissertation |
| 4 | <u>Teamwork</u> <ul style="list-style-type: none"> • Work in groups on practical exercises and discussions • Work within a research team | |
| 5 | <u>Independent learning skills</u> Take responsibility for <ul style="list-style-type: none"> • The design and conduct of a research project • Acquiring the necessary practical skills to carry out the research project • Acquiring the necessary IT and communication skills to meet the learning outcomes of the course • Work independently on assignments • Use information provided on the course to pursue the study of specific topics in depth | |

| E | Programme structure and features |
|----------|--|
| | <p>All modules are taught at Level M.</p> <p>The programme includes 3 core modules designed to support the research process: Research Methods (15 credits) Statistics (15 credits) Research Project Planning and Management (15 credits)</p> <p>Students will also choose one specialist module from the following 4 pathways: Antimicrobial Resistance (30 credits) Infection and Immunity (30 credits) Molecular Mechanisms of Cancer (30 credits) Reproduction and Development (30 credits)</p> <p>The 4 taught modules mentioned above make up 75 credits. The remaining 105 credits are allocated to a research project carried out for 9 months. Students will be expected to undertake a research project related to the specialist pathway they have chosen - Antimicrobial Resistance; Infection and Immunity; Molecular Mechanisms of Cancer; Reproduction and Development.</p> |
| | <p>'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'.</p> |
| | <p>Programme reference points – the following reference points were used in the preparation of this specification: SGUL Level M criteria, National Qualifications Framework for England, Wales and Northern Ireland.</p> |

| F | General teaching and learning strategies |
|----------|---|
| | <p>Students are expected to be of graduate standard when entering the programme and to utilise their undergraduate expertise and experience. The core and specialist 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. Lectures in the core modules will support the students with skills and strategies for the planning and management of their research project. Knowledge and skills developed in the Statistics module will be used in the process of writing up dissertation. Students are expected to undertake a wide range of reading and own study in addition to the taught sessions of specialist module to support their learning and development of critical appraisal skills.</p> |

| G | Assessment |
|----------|---|
| | <p>There will be assessments for each of the 4 taught modules.</p> <p>For Research Methods, there will be a formative oral presentation and a summative written research protocol for the proposed research project.</p> <p>For Statistics, there will be a written examination in which students are asked to apply statistical concepts to a set of data.</p> <p>For Research Project Planning and Management, there will be a written report exploring the wider implications of the student's chosen research project including ethical and legal issues, risk assessment, teamwork and dissertation planning.</p> <p>For specialist module, there will be an oral presentation and a literature review essay</p> |

exploring the current state of knowledge in the subject area.
Assignments will be set for each of the modules as outlined in the module handbooks.

The research project is assessed by a poster, an oral presentation, a dissertation, and supervisor's mark. Dissertation forms the written report of the research undertaken, which will be 15,000-25,000 words in length and will be submitted at the end of the year.

Students may be required to attend an oral examination if their performance is borderline pass/fail.

H Support for students and their learning

The course aims to provide a supportive learning environment. Students will be allocated an individual supervisor for the research project at the outset of the year. Progress reports are submitted by the student and reviewed by the academic staff at different stages over the course to monitor the progress of the student and provide additional support for those who struggle. They will also be able to refer to module leads for academic support on the core and the specialist 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 and the Deputy 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. Applicants should provide at least one academic reference and a personal statement detailing relevant experience, reasons for choosing the course and career ambition.

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 NHS, hospitals, pharmaceutical industry, which have a research aspect.

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

Students are asked to evaluate each core and specialist module and this information is considered by the Course Committee at which students are represented. Informal feedback from students is also welcomed. A programme of peer review of teaching is operated and staff receive feedback on their teaching. External examiners review student work and advise the Board of Examiners on the appropriateness of the standards being achieved. External examiners are also asked to write annual reports. The annual course report is prepared by the Course Director with advice from the Course Committee. This is considered by the Taught Postgraduate Courses Committee which is responsible for quality monitoring of programmes at this level. Graduate surveys are also carried out independently.

| | |
|----------|---------------------------------|
| L | Regulation of assessment |
|----------|---------------------------------|

The scheme of assessment is considered and revised as necessary by the Course Committee. This is reviewed each year by the Board of Examiners who advise on standards and the strengths and weaknesses of assessments. Assignment guidelines are set out in module handbooks and students are given marking criteria where appropriate. Regulations for the programme of study are approved by the Taught Postgraduate Courses Committee and the Senate and include regulations relating to assessment.

| | |
|----------|--|
| M | Indicators of quality and standards |
|----------|--|

External examiners prepare a report on the quality of the assessment process and standards of student work each year. External examiners commend particularly the standard achieved by candidates and a course prize is awarded annually for the best performance overall. Graduate surveys provide positive indications of the value students attach to their experience on the course and a number have gone on to study at PhD level or employment in the biomedical research field. Some students are successful in publishing work related to their achievements on the course.

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 module handbooks. Other key sources of information are:

- The St George's, University of London prospectus
- Course prospectus
- The St George's, University of London internet site
- General Regulations for students and programmes of study
- QAA subject review report