

## Programme Specification

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|----|--|---|---|----|---|----|
| 1  | <b>Awarding body</b>   | University of London                      |   |    |   |    |
| 2  | <b>Teaching Institution</b>                                  | <b>Birkbeck College</b>                   |   |    |   |    |
| 3  | <b>Programme Title(s)</b>                                    | <b>MRes Global Infectious Diseases</b>    |   |    |   |    |
| 4  | <b>Programme Code(s)</b>                                     | TMRGLIDS_C                                |   |    |   |    |
| 5  | <b>UCAS code</b>   | N/A                                       |   |    |   |    |
| 6  | <b>Home Department</b>                                       | Department of Biological Sciences         |   |    |   |    |
| 7  | <b>Exit Award(s)</b>   | PG Cert Microbiology (60 credits, taught) |   |    |   |    |
| 8  | <b>Duration of Study</b> (number of years)                   | 1 or 2 years (MRes, PG Cert)              |   |    |   |    |
| 9  | <b>Mode of Study</b>   | FT  | X | PT | X | DL |
| 10 | <b>Level of Award (FHEQ)</b>                                 | Level: 7                                  |   |    |   |    |
| 11 | <b>Other teaching depts or institution</b>                   | N/A                                       |   |    |   |    |
| 12 | <b>Professional, Statutory Regulatory Body(PSRB) details</b> | N/A                                       |   |    |   |    |
| 13 | <a href="#"><u>QAA Benchmark Group</u></a>                   | N/A                                       |   |    |   |    |

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| 14 | <b>Programme Rationale &amp; Aims</b>  |
|    | <p>This is a research-intensive postgraduate degree which will provide you with the skills and knowledge to carry out a substantial laboratory based research project in your chosen area of microbiology. You will join an existing research group under the guidance of a research supervisor, and you will spend the majority of your time on your research project. This can be in any of the Department's current research areas within microbiology. The remaining part of the degree is spent following advanced lecture modules from the MSc Microbiology courses that will provide you with the theoretical and technical background to your chosen research area.</p> <p>This programme is intended for students who want to gain the qualifications necessary for pursuing a research career, or who want to update their existing training. We welcome applications from international students.</p> |

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| 15 | <b>Entry Criteria</b>  |
|    | <p>Honours degree at minimum 2.2 level in a cognate discipline. Less- or alternatively-qualified applicants may be accepted after following a one-year qualifying course, or if they have appropriate work experience, or through registration on the Postgraduate Diploma Microbiology with the possibility of upgrading to the MRes after achieving adequate results (at least 2.2 level) in the first set of examinations</p> |

**Learning Outcomes**

On successful completion of this programme a student will be expected to be able to:

**Subject specific:**

- 1) Demonstrate a sound knowledge and understanding of the science underlying the key areas of microbiology methodology and its practical applications.
- 2) Show a critical understanding of recent advances in their field of study.
- 3) Critically assess current literature in the discipline.
- 4) Formulate a research or method development plan and carry out the appropriate literature and data searches.
- 5) Demonstrate a critical and professional approach to quality of analysis.
- 6) Demonstrate competent performance of standard microbiological techniques
- 7) Demonstrate proficiency in the use of key analytical techniques including, but not restricted to: molecular biology, biochemistry, analytical sciences , NMR.
- 8) Design effective experiments and effectively make use of experimental controls
- 9) Demonstrate knowledge of good laboratory practice, risk assessment and current UK safety legislation

**Intellectual:**

- 10) Follow complex scientific protocols.
- 11) Show critical reasoning.
- 12) Analyse, interpret and evaluate results.
- 13) Synthesise information from diverse sources.
- 14) Formulate and test basic hypotheses.
- 15) Relate subject-specific knowledge to a broader scientific context.

**Practical:**

- 16) Carry out experimental procedures and operate advanced molecular microbiology equipment.
- 17) Work safely and efficiently in a laboratory.
- 18) Access a variety of subject-specific and more generic databases and information sources.
- 19) Apply skills to practical problems and, where appropriate develop new skills.
- 20) Use different forms of IT confidently.

**Personal and social**

- 21) Work as part of a team both in person and via virtual interaction.
- 22) Manage time efficiently to balance the taught and independent research areas of the programme.
- 23) Present and communicate material and ideas in both written (including electronic communication) and oral formats.
- 24) Learn independently.
- 25) Show a professionalism in their approach to microbiological work.

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| 17 | <b>Learning, teaching and assessment methods</b>  |
|    | <p>This will involve face-to-face teaching of the underlying principles of the core topics, in taught modules and through immersion with active researchers in the laboratories. Considerable emphasis will be placed on developing practical laboratory and computer skills and on systematically applying these skills to complex research problems in original and flexible ways.</p> <p>Taught modules will include tutorials, formal lectures, problem-solving sessions (computer-based, classroom-based and lab-based), laboratory practical sessions, and computer-aided learning (e.g. through Moodle). The project module will require students to prepare and deliver oral presentations and to generate written reports.</p> <p>Much teaching will be delivered via students' direct experience of hands-on scientific research, under the supervision of world-class research staff, in our own research laboratories, or in industrial settings if appropriate (e.g. through placement or if the student is already employed in a relevant job). This immersion in the research environment will provide in-depth training in specialist methods and in critical analysis of data.</p> |

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| 18 | <b>Programme Description</b>  |
|    | <p>The programme may be taken full-time in one academic year, or part-time, over two academic years. Year 1 in either case consists of the compulsory 30-credit module, Research in Microbiology, and a selection of two optional modules from three available in the year of entry. (Note that the optional modules are taught on an alternating year basis, so the 3 modules available from which to choose 2, will differ depending on your year of entry.)</p> <p>Full-time students will also undertake a 120-credit research project module in Year 1. Part-time students will take the research project module on its own in Year 2.</p> |

| 19   | <b>Programme Structure</b> |  |         |            |
|--|----------------------------|--|---------|------------|
| <b>Full Time programme (1 year)</b>  |                            |  |         |            |
| <b>Year 1</b>  |                            |  |         |            |
| Level  | Module Code                | Module Title   | Credits | Status*    |
| 7  | BCBC002S7                  | Research in Microbiology   | 30      | Compulsory |
| 7  | From List                  | Optional module  | 15      | Option     |
| 7  | From List                  | Optional module  | 15      | Option     |
| 7  | SCBS017Q7                  | Research Project and Dissertation MRes<br>Global Infectious Diseases | 120     | Compulsory |
| Optional modules to be selected from the list at the end of this section. Not all modules run in the same academic year, so the available modules depend on your year of entry into the programme. |                            |  |         |            |

| <b>Part-Time programme (2 years)</b>   |  |  |                |                |
|--|--|--|----------------|----------------|
| <b>Year 1</b>  |  |  |                |                |
| <b>Level</b>   | <b>Module Code</b>   | <b>Module Title</b>  | <b>Credits</b> | <b>Status*</b> |
| 7  | BCBC002S7  | Research in Microbiology   | 30             | Compulsory     |
| 7  |  | Optional module  | 15             | Option         |
| 7  |  | Optional module  | 15             | Option         |
| <b>Year 2</b>  |  |  |                |                |
| 7  | SCBS017Q7  | Research Project and Dissertation MRes<br>Global Infectious Diseases | 120            | Compulsory     |
|  | Optional modules to be selected from the list at the end of this section. Not all modules run in the same academic year, so the available modules depend on your year of entry into the programme. |  |                |                |
| <b>INDICATIVE OPTIONAL MODULES (full-time and part-time programmes)</b>                              |  |  |                |                |
| <b>Level</b>   | <b>Module Code</b>   | <b>Module Title</b>  | <b>Credits</b> | <b>Status*</b> |
| 7  | BCBC017H7  | Medicinal Chemistry of Natural Products                              | 15             | Option         |
| 7  | BCBC007H7  | Molecular Microbiology   | 15             | Option         |
| <i>The above-listed modules run in Autumn Term: BCBC017H7 in even years, BCBC007H7 in odd years.</i> |  |  |                |                |
| 7  | BCBC009H7  | Antimicrobials   | 15             | Option         |
| 7  | BCBC005H7  | Medical Bacteriology   | 15             | Option         |
| <i>The above-listed modules run in Spring Term: BCBC009H7 in even years, BCBC005H7 in odd years.</i> |  |  |                |                |
| 7  | BCBC006H7  | Bacterial Pathogenicity  | 15             | Option         |
| 7  | BCBC008H7  | Parasitology   | 15             | Option         |
| <i>The above-listed modules run in Summer Term: BCBC006H7 in even years, BCBC008H7 in odd years.</i> |  |  |                |                |

**Status\***

CORE – Module must be taken and passed by student; COMPULSORY – Module must be taken, mark can be reviewed at sub-exam board; OPTIONAL – Student can choose to take this module

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| 20 | <b>Programme Director</b>              | Dr Sanjib Bhakta   |
| 21 | <b>Start Date (term/year)</b>          | Autumn 2011  |
| 22 | <b>Date approved by TQEC</b>           | Spring 2011  |
| 23 | <b>Date approved by Academic Board</b> | Summer 2011  |
| 24 | <b>Date(s) updated/amended</b>         | <b>June 2017.</b> Title changed. 2-year part-time route added. Struck defunct modules from options list. |