Programme Specification

Awarding Body/Institution: Queen Mary, University of London
Teaching Institution: Queen Mary, University of London
Name of Final Award and Programme Title: BSc (intercalated) in Infectious Disease and Epidemiology
Name of Interim Award(s):
Duration of Study / Period of Registration: One year (full time)
QM Programme Code / UCAS Code(s):
QAA Benchmark Group:
FHEQ Level of Award: Level 6
Programme Accredited by: N/A
Date Programme Specification Approved:
Responsible School / Institute: Blizard Institute

Programme Outline

The study of infectious diseases is a young science, whose origin as an independent field of investigation can be traced back to the discovery of microorganisms. The understanding of infectious diseases, their epidemiology and the immune responses towards pathogens has increased considerably, enabling infectious disease specialists to develop effective therapeutic strategies and to prepare for future challenges.

The science of infectious disease and epidemiology is an interdisciplinary subject situated at the interface between medicine, molecular and cell biology and the social sciences. This fact is taken into account by offering MBBS and BDS students the possibility of studying these subjects thoroughly in theory and practice in the form of an intercalated MSci in Infectious Disease and Epidemiology. Detailed knowledge of infectious disease and epidemiology is important for all doctors, given the ubiquity of infectious diseases in all parts of medical practice. Thus there is a growing need for scientifically trained doctors with an interest in infection, who will be in a position to carry out research to answer basic and translational research questions.

This programme builds on the strength and experience in teaching and learning from the Centre of Immunology and Infectious Disease and Centre for Primary Care and Public Health at the Blizard Institute, Barts & The London Medical School.
Programme Title:

**Aims of the Programme**

Students will acquire the critical skill and knowledge to recognise clinical manifestations of infections, initiate effective treatment strategies for their patients, and conduct research into current infectious disease challenges.

Specifically this programme will enable students to:

1. Compare and contrast the role of different infectious pathogens in the natural history of diseases, and appraise the relation between pathogen-host interactions and epidemiology of infectious diseases.
2. Critique the basics of molecular and cell biology, and devise applications in clinical diagnostics and epidemiology to design and evaluate treatment interventions.
3. Synthesise their own research goals and interpret their findings in the light of current knowledge in the field through in depth study of a number of basic problems in molecular and clinical virology, molecular and clinical microbiology and immunology.
4. Design experiments clinical trials, collect and interpret relevant data and communicate these results within the scientific community after first-hand experience of experimental investigations in infectious disease and/or epidemiology related projects.

**What Will You Be Expected to Achieve?**

Students who successfully complete the programme will be able to respond confidently and effectively to infectious disease challenges encountered at hospitals/clinics. They will be able to work in public health settings and work effectively in multi-disciplinary teams on behalf of local communities.

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**Academic Content:**

| A1 | Knowledge and understanding of clinical microbiology, virology and immunology |
| A2 | Knowledge and understanding of infectious disease and epidemiology; qualitative research methods |
| A3 | Knowledge and understanding of the principles and policy norms of public health and health systems in relation to infectious disease |

**Disciplinary Skills - able to:**

| B1 | critically apply multidisciplinary perspectives to infectious disease challenges |
| B2 | assess the changing context of public health policy in relation to infectious disease and epidemiology |
| B3 | evaluate and critique current public health policies (infectious disease) and propose alternative approaches |

**Attributes:**

| C1 | ability to understand and critically analyse precisely and effectively in the context of infectious disease |
| C2 | ability to participate confidently in academic and professional debate |

**How Will You Learn?**

Each topic will be taught using a range of methods, varying according to the subject and learning objectives of the module.
modules will include lectures, small group tutorials, and independent study. Most modules will follow a format of structured preparatory work (reading and reflection exercises), weekly interactive lectures, a two-hour small group seminar. Visiting speakers will provide insight into current research and clinical advancements. Data analysis sessions (epidemiology and statistics) will include introduction to real data sets such as those from local or national public health observatories.

How Will You Be Assessed?

Different modules will be assessed differently, depending on the learning objectives. The assessments are spread throughout the academic year, culminating in a written thesis summarizing and discussing the research project outcomes.

- Written exams for 5 of the modules (SAQ or SAQ/Essay or MCQ/EMQ based for Clinical Microbiology, Molecular Biology, Immunology, Virology, and Epidemiology)
- Oral Presentation and Poster Presentation (Epidemiology and Clinical Microbiology)
- Written paper critique (2000 words, Virology) and practical skills test (Molecular Biology)
- Dissertation (8000 words, Research Project- 12 weeks lab)

Concomitant with term 1 and term 2 we offer feed forward and feedback workshops on how to write a critique/dissertation, how to design a poster, How to prepare oral presentations, SAQ/MCQ/EMC/essay writing. These sessions prepare to students for the different assessments, but more importantly practise science writing and communication within science.

How is the Programme Structured?

One academic year – 2 terms for the taught elements with basic research project embedded throughout term 2. Level 6 throughout.

As listed below: five core modules (15 ACP each), plus a research project (accounting for 45 ACP): total of 120 ACP.

In the first semester MSci students will focus on Clinical Microbiology, Virology, Immunology and Molecular Biology to develop a understanding of principles in infectious disease. Epidemiology and Statistics will further their understanding of global public health challenges in infectious disease.

Throughout the academic year we will provide specific workshop on on scientific writing (critique and dissertation), oral/poster presentation of scientific results and support for essay/SAQ/MCQ examinations.

In the second semester iBSc students will mainly focus on a research project allocated at the beginning of the programme. For this research project iBSc students join a research active group within SMD for a minimum of 12 weeks, followed by a period of writing-up and submission of dissertation. A Viva concludes the academic year.

Academic Year of Study 1

<table>
<thead>
<tr>
<th>Module Title</th>
<th>Module Code</th>
<th>Credits</th>
<th>Level</th>
<th>Module Selection Status</th>
<th>Academic Year of Study</th>
<th>Semester</th>
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<tr>
<td>Molecular Biology in Infectious Disease</td>
<td>15</td>
<td>6</td>
<td>Core</td>
<td>1</td>
<td>Semester 1</td>
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What Are the Entry Requirements?

The pathway (course) is of one academic year’s duration, designed specifically for medical or dental students who have completed three or four years of the MBBS/BDS course, i.e. students who wish to intercalate a degree before entering the fourth or final year of the MBBS/BDS degree programme.

The course is open to all eligible students within the University of London, and also to students who have fulfilled the above entrance requirements at other UK or EU medical schools. The course is offered within the Blizard Institute and the successful candidates will receive a iBSc degree of Queen Mary University London.

The entrance requirements are:

a. Completion of the first 3 years of a medical/dental course and satisfactory performance in the examinations prior to entering the iBSci.

b. The course is offered for a minimum of 8 students, with a possible maximum of 20. No candidate will be accepted without interview.

c. Selection of internal students by the standardised intercalated degree ranking/interview procedure, as outlined in the intercalated degrees prospectus and web pages.

How Do We Listen and Act on Your Feedback?

The Staff-Student Liaison Committee provides a formal means of communication and discussion between schools/institutes and its students. The committee consists of student representatives from each year in the school/institute together with appropriate representation from staff within the school/institute. It is designed to respond to the needs of students, as well as act as a forum for discussing programme and module developments. Staff-Student Liaison Committees meet regularly throughout the year.

Each school/institute operates a Learning and Teaching Committee, or equivalent, which advises the School/Institute Director of Taught Programmes on all matters relating to the delivery of taught programmes at school level including monitoring the application of relevant QM policies and reviewing all proposals for module and programme approval and amendment before submission to Taught Programmes Board. Student views are incorporated in the committee's work in a number of ways, such as through student membership, or consideration of student surveys.

All schools/institutes operate an Annual Programme Review of their taught undergraduate and postgraduate provision. APR is a continuous process of reflection and action planning which is owned by those responsible for programme delivery; the main document of reference for this process is the Taught Programmes Action Plan (TPAP) which is the summary of the school/institute's work throughout the year to monitor academic standards and to improve the student experience. Students' views are considered in this process through analysis of the NSS and module evaluations.
## Programme Title:

**Academic Support**

The team running the programme (programme lead and module organizers) have long standing experience in PG and UG teaching. This programme is a further development based on the successful implementation and running of the intercalated BSc Infection and Immunity (2008-2013) including academic support throughout the entire programme. All module organizers meet up at regular intervals and will be in contact with the external examiner throughout the academic year to ensure high quality teaching and learning.

Students will be allocated a dissertation supervisor and lab-supervisor to ensure guidance throughout the academic year. Introductory and writing workshops will be provided to strengthen student understanding of scientific conduct and skills in scientific writing (research topic, dissertation) and oral presentation.

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### Programme-specific Rules and Facts

N/A

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### Specific Support for Disabled Students

Queen Mary has a central Disability and Dyslexia Service (DDS) that offers support for all students with disabilities, specific learning difficulties and mental health issues. The DDS supports all Queen Mary students: full-time, part-time, undergraduate, postgraduate, UK and international at all campuses and all sites.

Students can access advice, guidance and support in the following areas:
- Finding out if you have a specific learning difficulty like dyslexia
- Applying for funding through the Disabled Students’ Allowance (DSA)
- Arranging DSA assessments of need
- Special arrangements in examinations
- Accessing loaned equipment (e.g. digital recorders)
- Specialist one-to-one "study skills" tuition
- Ensuring access to course materials in alternative formats (e.g. Braille)
- Providing educational support workers (e.g. note-takers, readers, library assistants)
- Mentoring support for students with mental health issues and conditions on the autistic spectrum.

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### Links With Employers, Placement Opportunities and Transferable Skills

N/A
Programme Title:

Programme Specification Approval

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<tr>
<th>Person completing Programme Specification</th>
<th>Dr M T Dittmar, Sen. Lecturer in Virology, Blizard Institute</th>
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<tr>
<td>Person responsible for management of programme</td>
<td>Dr M T Dittmar, Sen. Lecturer in Virology, Blizard Institute</td>
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<tr>
<td>Date Programme Specification produced/amended by School Learning and Teaching Committee</td>
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