

Programme Title: MSc in Experimental Oral Pathology (Oral Sciences)



Programme Specification

Awarding Body/Institution	Queen Mary University of London
Teaching Institution	Queen Mary University of London
Name of Final Award and Programme Title	MSc in Experimental Oral Pathology (Oral Sciences)
Name of Interim Award(s)	N/A
Duration of Study / Period of Registration	One Year Full-time
QM Programme Code / UCAS Code(s)	A4US
QAA Benchmark Group	
FHEQ Level of Award	Level 7
Programme Accredited by	N/A
Date Programme Specification Approved	
Responsible School / Institute	Institute of Dentistry

Schools which will also be involved in teaching part of the programme

Institute of Dentistry

Institution(s) other than Queen Mary that will provide some teaching for the programme

N/A

Programme Outline

This one year full-time course is designed as an introduction to the principles of experimental pathology applied to oral disease. It is principally intended to provide grounding in experimental method for dental graduates who plan to follow either a career in academic dentistry or one of the clinical specialties. It also provides an opportunity for science graduates to learn about oral disease, in preparation for a career in dental research. The degree is awarded on the results of an examination and submission of a report based on a research project. The programme includes eight taught modules and a research project module.

There is a structured course of seminars with associated practical work. The curriculum is designed around a core dealing with the structure and behaviour of cells and tissues in health and disease. This core begins with fundamental and general concepts of cell biology and continues with the application of these concepts to a consideration of oral and dental disease. Related disciplines such as oral microbiology and immunology are also covered.

Throughout the course, emphasis is placed on the evidence upon which the concepts are based and the way in which such evidence is obtained by observation and experiment. Particular value is placed on the format of the seminars in which students, are encouraged to actively participate.

Running in parallel with appropriate parts of the core course are several related series of seminars dealing with research

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methods and statistics and with techniques of fundamental importance to experimental pathology such as tissue culture, molecular biological techniques, Immunocytochemistry, light and electron microscopy.

Aims of the Programme

The general aims of the taught postgraduate courses offered in the Institute of Dentistry are:

- Provide full time and part time opportunities for those wishing to develop their skills and understanding in oral health related sciences.
- Develop the research and service careers of dentists and professionals complementary to dentistry.

The general objectives of the taught postgraduate courses are to provide students with the skills to:

- conduct literature searches, and evaluate original published research.
- design research protocols, execute a supervised research project, analyse and report findings supported by references.
- demonstrate a range of transferrable and specialised skills.

The specific course objectives are to enable students to:

- understand the basic principles of the range of techniques applied to study oral biology
- to apply of these techniques in the study of tissue structure and function in health and disease, with particular reference to oral tissues
- understand the basic pathological processes underlying oral disease.

What Will You Be Expected to Achieve?

On successful completion of the programme students will be expected to have gained a thorough understanding of the biology of the oral cavity with respect to health and disease and be confident in their ability to design research questions and carry out research programs. The programme outcomes are referenced to the QAA benchmark statements and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008). These relate to a typical student. The SEEC credit level descriptors for Further and Higher Education 2003 and QMUL Statement of Graduate Attributes have been used as the guide in the design of the curriculum.

Academic Content:

A 1	Current concepts of selected topics Experimental Oral Pathology
A 2	Knowledge of the biology and pathology as relevant to health and disease in the oral cavity
A 3	Write accurate and coherent accounts of academic and clinical research

Disciplinary Skills - able to:

B 1	Show enthusiasm for studying and understanding biological research with respect to the oral cavity
B 2	Critically read scientific papers, understand the methods used in investigations and the significance of results

B 3	Acquire presentation skills that allows for dissemination of knowledge in various forms.
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Attributes:	
C 1	Write an in depth report based on laboratory work carried out by the student
C 2	Engage critically with the global literature in the field of Oral pathology
C 3	Acquire enhanced skills in communication, research capacity and information dissemination expertise.

How Will You Learn?

The programme aims to promote teaching and learning enriched by original scholarship and dental research, to encourage students to become independent learners. Students will accept responsibility for their own learning and will be encouraged to develop powers of critical thought and reflection. Key skills in information technology and oral and written presentations will be enhanced. The course will offer students the opportunity to become familiar with the issues of experimental study design, laboratory-based research, data analysis and critical thought.

In addition to the formal seminar programme, time is set aside for particular readings and reviews, discussion and problem solving for student projects, for practical exercises, and for feedback and evaluation of the course itself. Students will receive a course reading list at the start of teaching.

The students will also be offered opportunities to attend several annual research days which will support their learning objectives around experimental design and presentation skills (William Harvey, Stem cell Symposium and any others which become available during the year).

Research active staff will give seminars on their work with special emphasis on the experimental design of the studies. The course aims to offer a high teacher/student ratio so that access to advice and ease of communication can be assured.

How Will You Be Assessed?

Assessment will be:
Examination using short answers
Extended essay
Practical Portfolio
Poster presentation
Project thesis

How is the Programme Structured?

Please specify the full time and part time programme diets (if appropriate).

This one year full-time course (180 credits) is designed as an introduction to the principles of experimental pathology applied to oral disease. It is principally intended to provide grounding in experimental method for dental graduates who plan to follow either a career in academic dentistry or one of the clinical specialties. It also provides an opportunity for science graduates to learn about oral disease, in preparation for a career in dental research. The degree is awarded on the results of an examination

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and submission of a report based on a research project.

There is a structured course of seminars with associated practical work. The curriculum is designed around a core dealing with the structure and behavior of cells and tissues in health and disease. This core begins with fundamental and general concepts of cell biology and continues with the application of these concepts to a consideration of oral and dental disease. Related disciplines such as oral microbiology and immunology are also covered.

Throughout the course, emphasis is placed on the evidence upon which the concepts are based and the way in which such evidence is obtained by observation and experiment. Particular value is placed on the format of the seminars in which students are encouraged to actively participate.

Running in parallel with appropriate parts of the core course are several related series of seminars dealing with research methods and statistics and with techniques of fundamental importance to experimental pathology such as tissue culture, molecular biological techniques, immunocytochemistry, light and electron microscopy.

The course structure is tabulated below.

Academic Year of Study FT - Year 1

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Fundamental of Research Methods	DIN7011	15	7	Compulsory	1	Semesters 1 & 2
Molecular Organisation of the Eukaryotic Cell	DIN7021	15	7	Compulsory	1	Semesters 1 & 2
Techniques in Cell and Molecular Biology	DIN7022	15	7	Compulsory	1	Semesters 1 & 2
Biology of Oral Tissues	DIN7023	15	7	Compulsory	1	Semester 1
Cellular Pathology	DIN7024	15	7	Compulsory	1	Semesters 1 & 2
Inflammation and Immunology (General and Oral)	DIN7025	15	7	Compulsory	1	Semester 1
Oral Pathology and Microbiology	DIN7026	15	7	Compulsory	1	Semesters 1 & 2
Laboratory Techniques	DIN7027	15	7	Compulsory	1	Semester 2
Research Project	DIN7029	60	7	Compulsory	1	Semester 3

What Are the Entry Requirements?

A recognised degree in dentistry, medicine or biological sciences with preferably one year post-qualification experience.

A minimum IELTS score of 6.5 is also required for overseas students.

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. All lectures will have feedback documentation.

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. An external examiner has been appointed and approved -Dr Christine McCreary, University College Cork ,Ireland.

Academic Support

Students undergo an induction week at the start of the programme.

Module leads and module teachers are available to offer academic support.

Research project supervisors provide support during the research project.

Programme-specific Rules and Facts

None

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

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- 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)
- Access to specialist mentoring support for students with mental health issues and Autistic Spectrum Disorders.

Links With Employers, Placement Opportunities and Transferable Skills

Candidates are expected to take up full time teaching, research or industry positions after completion of the course. The module taken in Management, Leadership and Presentation Skills will help students who are expected to take up senior managerial roles in a laboratory or teaching establishment.

After taking the course the candidate will have a good scientific base and transferable advanced technical and research skills which will be attractive to a future employer.

This mix of skills is very unique in the dental field and should create world opinion leaders in the field of dental technology and materials.

Programme Specification Approval

Person completing Programme Specification

Dr Lesley Ann Bergmeier

Person responsible for management of programme

Dr Lesley Ann Bergmeier

Date Programme Specification produced/amended by School Learning and Teaching Committee

22 Sep 2016

Date Programme Specification approved by Taught Programmes Board