

Programme Title: MSc Oral Biology



## Programme Specification

Awarding Body/Institution	Queen Mary University of London
Teaching Institution	Queen Mary University of London
Name of Final Award and Programme Title	Master of Science MSc MSc in Oral Biology
Name of Interim Award(s)	N/A
Duration of Study / Period of Registration	1 Year
QM Programme Code / UCAS Code(s)	A453
QAA Benchmark Group	
FHEQ Level of Award	Level 7
Programme Accredited by	N/A
Date Programme Specification Approved	August 2015
Responsible School / Institute	Institute of Dentistry

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

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

### Programme Outline

Oral Biology is the umbrella term for a range of basic sciences fundamental for understanding of the underlying scientific principles relevant to developing modern dentistry. These include dental anatomy, oral physiology, dental biophysics. Other subjects will include the basic biochemistry in relation to dentistry, chemistry of bone and tooth biominerals and components, aetiology of dental caries and erosion, saliva biochemistry, oral microbiology, and dental materials science, modern 2D and 3D X-ray imaging. In addition to basic science lectures, there will also be lectures from practicing clinicians on current problems in modern clinical dentistry. Students will be introduced to the role of the dental industry in the application of the oral sciences in the development of innovative dental treatments. Key to this proposal is to introduce students to the concepts of Minimal Invasive Dentistry, particularly the development of therapeutic approaches to delivery of 21st century dentistry. A research project will be a significant component of this course. A key element to this course is that it will be delivered within a clinical context, stressing the importance of a scientific approach to the delivery of dental care.

It is envisaged that this course should be structured in order to be accessible to both dental and basic/applied science graduates, who may in future be responsible for teaching of these or related subjects, and/or may need a greater understanding of the subject in order to develop their future academic or industrial research careers.

There is a significant potential overseas market for this course, identified by Prof. Ray Croucher during visits to Pakistan and elsewhere, and, also by Dr Paul Anderson, who was a supervisor on the MSc course in Dental Materials run by the QM Materials Dept.

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The core staff team (all academic staff members of the Centre for Oral Growth and Development) has been assembled, and they will be responsible for the delivery of the main modules. Other staff have both clinical and non-clinical been identified and have agreed to contribute to the delivery of lectures for this course. The core staff team will be responsible for the supervision of the Research Projects. The core staff have considerable experience of supervision of research projects of this nature, and PhD supervision. The projects will be carried out in the Research Laboratories of Dental Physical Sciences Unit (Centre for Oral Growth and Development) based at Mile End.

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Educational

### Aims of the Programme

To provide a conceptual understanding of the basic sciences underlying dentistry required for undertaking research in dental sciences.

To develop oral science research skills and methods.

To provide a suitable entry qualification for PhD programmes in Dental Physical Sciences and related disciplines.

### What Will You Be Expected to Achieve?

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced to the relevant QAA benchmark statement(s) (see above) and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008), and relate to the typical student. Additionally, the SEEC Credit Level Descriptors for Further and Higher Education 2003 and Queen Mary Statement of Graduate Attributes have been used as a guiding framework for curriculum design.

#### Academic Content:

A 1	Current concepts in selected topics in Oral biology
A 2	The knowledge of Oral Biology has been applied for practical purposes in dentistry
A 3	Write coherent, argued accouhnts on current research areas.

#### Disciplinary Skills - able to:

B 1	Show an enthusiasm for studying developments in science, particularly inn the area of Oral Biology
B 2	Select and read scientific papers, and assess the problem being addressed, the basis of the methods of study, and the significance of the results.
B 3	Present scientific information in a variety of formats.

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Attributes:

C 1	Explore at depth a specific research area and write a dissertation on the subject.
C 2	
C 3	

### How Will You Learn?

Teaching and learning will comprise of lectures given by Academic Staff mostly of the Dental Physical Sciences Unit, Centre for Oral Growth and Development, Institute of Dentistry., Journal Clubs, projects.

### How Will You Be Assessed?

Assessment will be:

Examination using short essay and long essay questions.  
Project thesis  
Project presentation

### How is the Programme Structured?

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

This is a standard 1 year MSc program of 12 modules (180 credit), comprising of 8 taught module and 4 project modules. The course structure is shown in table below.

Academic Year of Study

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Properties of Dental Materials I	DIN7008	15	7	Compulsory	1	
Dental Hard Tissues and their Microenvironment	DIN7151	15	7	Compulsory	1	
Minimally Invasive Dentistry	DIN7152	15	7	Compulsory	1	
Oral MicroBiology	DIN7153	15	7	Compulsory	1	
Biom mineralisation	DIN7154	15	7	Compulsory		
Use and investigation of Dental Tissues	DIN7157	15	7	Compulsory		
Introduction to Oral Biology	DIN7156	15	7	Compulsory		
Statistics Ethics and Research	DIN7157	15	7	Compulsory		
Project	DIN6001	60	7	Core		

**What Are the Entry Requirements?**

A medical or dental degree, a degree in basic physical sciences, biological sciences, or bioengineering, or the equivalent in professional qualifications and experience.

**How Do We Listen and Act on Your Feedback?**

The course will include an Induction week at the beginning, including introduction to QM, Introduction to the Dept, Introduction to staff. In addition there will be lectures on safety in the laboratories.  
 A SSLC has been set up and meets regularly. Each year cohort elects a student representative..  
 All lectures will have feedback documentation  
 All students will be assigned a personal tutor  
 All Module Manager staff will meet monthly.  
 An external advisor Prof. M Huysmans University of Nijmegen Dental School , has been appointed and has agreed to monitor progress of the course.  
 The external examiner is Dr Chris Longbottom, Kings College , London.

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### Academic Support

### Programme-specific Rules and Facts

N/A

### Specific Support for Disabled Students

As College policy.

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

We have links with GC(UK) (The UK division of a Japanese dental product company) and GlaxoSmithKline (Weybridge), who will provide some materials for the course. GC (UK) run training courses at their European HQ in Leuven, and discussion are underway to enable our students to attend these.

Programme

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## Programme Specification Approval

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**Person completing Programme Specification**

Prof. Paul Anderson

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**Person responsible for management of programme**

Prof. Paul Anderson

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

**Date Programme Specification approved by  
Taught Programmes Board**

August 2015