Programme Specification (PG)

**Awarding body / institution:** Queen Mary University of London

**Teaching institution:** Queen Mary University of London

**Name of final award and programme title:** MSc in Oral Biology

**Name of interim award(s):** N/A

**Duration of study / period of registration:** 1 Year

**QMUL programme code(s):** PMSF-QMDENT1  PSOBI  A4S3

**QAA Benchmark Group:** Dentistry

**FHEQ Level of Award:** Level 7

**Programme accredited by:** NA

**Date Programme Specification approved:** 16 Jan 2019

**Responsible School / Institute:** Institute of Dentistry

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

NA

Collaborative institution(s) / organisation(s) involved in delivering the programme:

NA

**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.

The core staff team (all academic staff members of the Centre for Oral Growth and Development) has been assembled, and they
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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 Bioengineering formerly Centre for Oral Growth and Development) based at Mile End.

**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 accounts on current research areas. |

**Disciplinary Skills - able to:**

| B 1 | Show an enthusiasm for studying developments in science, particularly in 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:

| C1 | Explore at depth a specific research area and write a dissertation on the subject. |

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 structure of the programme diets for all variants of the programme (e.g. full-time, part-time - if applicable). The description should be sufficiently detailed to fully define the structure of the diet.

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 below.

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Name</th>
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</thead>
<tbody>
<tr>
<td>DIN7011</td>
<td>Fundamentals of Research Methods</td>
</tr>
<tr>
<td>DIN7156</td>
<td>Introduction to Oral Biology 1</td>
</tr>
<tr>
<td>DIN7157</td>
<td>Use and Investigation of Dental Tissues</td>
</tr>
<tr>
<td>DIN7151</td>
<td>Dental Hard Tissues</td>
</tr>
<tr>
<td>DIN7008</td>
<td>Properties of Dental Materials 1</td>
</tr>
<tr>
<td>DIN7153</td>
<td>Oral Microbiology</td>
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<tr>
<td>DIN7154</td>
<td>Biomineralisation and Biomimetics</td>
</tr>
<tr>
<td>DIN7152</td>
<td>Minimally Invasive Dentistry</td>
</tr>
<tr>
<td>DIN7155</td>
<td>Oral Biology Project</td>
</tr>
</tbody>
</table>

Academic Year of Study   FT - Year 1
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<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>
</tr>
</thead>
<tbody>
<tr>
<td>Properties of Dental Materials I</td>
<td>DIN7008</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semester 1</td>
</tr>
<tr>
<td>Dental Hard Tissues and their Microenvironment</td>
<td>DIN7151</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semesters 1 &amp; 2</td>
</tr>
<tr>
<td>Minimally Invasive Dentistry</td>
<td>DIN7152</td>
<td>15</td>
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<td>Compulsory</td>
<td>1</td>
<td>Semesters 1 &amp; 2</td>
</tr>
<tr>
<td>Oral Biology Project</td>
<td>DIN7155</td>
<td>60</td>
<td>7</td>
<td>Core</td>
<td>1</td>
<td>Semesters 1-3</td>
</tr>
</tbody>
</table>

What are the entry requirements?

The minimum entry requirement is a 2.2 UK degree or the overseas equivalent in a relevant subject. Degree disciplines such as Medicine, Dentistry, Chemistry, Biology or related subjects in the Sciences will be considered.

If your first language is not English, you must provide evidence of your English language proficiency. Proficiency in written and spoken English is essential and non-native English speakers are required to have a minimum overall IELTS score of 6.5 with a writing score of 6.0 at the start of the course.

How will the quality of the programme be managed and enhanced? How do we listen to 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.
What academic support is available?

Programme-specific rules and facts

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

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 Specification Approval

Person completing Programme Specification: Mrs Lorraine Low, Senior Quality Assurance Administrator
Programme Title: Master of Science in Oral Biology

Person responsible for management of programme: Prof. Paul Anderson

Date Programme Specification produced / amended by School / Institute Learning and Teaching Committee: 16 Jan 2019

Date Programme Specification approved by Taught Programmes Board: 16 Jan 2019