Programme Title: MSc in Oral Biology

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): PG Certificate in Oral Biology (60 credits)
PG Diploma in Oral Biology (120 credits)
Duration of study / period of registration: 1 Year
Queen Mary programme code(s): PMSF-QMDENT1 PSOBI QAA
QAA Benchmark Group: Dentistry
FHEQ Level of Award: Level 7
Programme accredited by: N/A
Date Programme Specification approved: 14 Nov 2022
Responsible School / Institute: Institute of Dentistry

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

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

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 additional 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 will be responsible for the delivery of the main modules. Other staff who are both clinical and non-clinical 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) based at Mile End.

The full time campus programme is also open to undergraduate dental students who wish to (and are eligible to) intercalate a Masters degree into their BDS studies.

For these students there are entry criteria that differ from non-intercalating applicants - in addition to the equivalent English proficiency, intercalating students need to have:

1. Successfully completed at least three years of the BDS or equivalent dental course (for clinically based masters this must include the equivalent of one year of patient based teaching (in hospital/dental practices/clinics)).
2. Passed BDS year 3 or 4 exams immediately prior to entry at the first opportunity.
3. Demonstrate a clear and unequivocal interest in the field by written application and/or interview.
4. For students internal and external to QMUL it is confirmed that the beginning of the first term for the following year starts after all the QMUL Masters assessments are completed.

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. 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 2010 and Queen Mary Statement of Graduate Attributes have been used as a guiding framework for curriculum design.

Academic Content:

| A1 | Current concepts in selected topics in Oral biology. |
| A2 | The knowledge of Oral Biology has been applied for practical purposes in dentistry. |
| A3 | Write coherent, argued accounts on current research areas. |
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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. |

Attributes:

| C 1 | 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, Journal Clubs, projects, given by Academic Staff mostly of the Dental Physical Sciences Unit, Centre for Oral Bioengineering, Institute of Dentistry.

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?

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.
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### Academic Year of Study
**FT - Year 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>
</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>Minimally Invasive Dentistry</td>
<td>DIN7152</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semester 1</td>
</tr>
<tr>
<td>Biology of Oral Tissues</td>
<td>DIN7023</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semesters 1 &amp; 2</td>
</tr>
<tr>
<td>Introduction to Oral Biology</td>
<td>DIN7156</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semester 1</td>
</tr>
<tr>
<td>Oral Pathology and the oral microbiome</td>
<td>DIN7028</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semesters 1 &amp; 2</td>
</tr>
<tr>
<td>Fundamentals of Research Methods</td>
<td>DIN7011</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semesters 1 &amp; 2</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>Semester 2</td>
</tr>
<tr>
<td>Biomineralisation</td>
<td>DIN7154</td>
<td>15</td>
<td>7</td>
<td>Compulsory</td>
<td>1</td>
<td>Semester 2</td>
</tr>
<tr>
<td>Level 7 Research Project</td>
<td>DIN7000</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 Dental Quality Assurance Committee oversees all aspects of the quality of the programme including module evaluations, external examiner comments and regularly reviews the assessment criteria. Feedback from Module evaluations and the Postgraduate Taught Experience Survey (PTES) are also considered by this committee.
We also operate an Annual Programme Review of our taught undergraduate and postgraduate provision. The process is normally organized at a School-level basis with the Dean for Dentistry responsible for the completion of the school’s Annual Programme Reviews. Students’ views are considered in this process through analysis of the PTES and module evaluations. Queen Mary also carries out a Periodic Review of education programmes within the Institute of Dentistry and the report, commendations and recommendations are considered by the Quality Assurance Committee and the Dental Education Committee.

The Staff-Student Liaison Committee (SSLC) provides a formal means of communication and discussion between Schools and 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. The SSLC meets regularly throughout the year.

Each school operates a Learning and Teaching Committee (Dental Education Committee), which advises the Dean for Dentistry 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 into this Committee’s work in a number of ways, such as through student membership, or consideration of Postgraduate Taught Experience Student surveys (PTES).

What academic support is available?

Your wellbeing is very important to us. The Student Support Office (SSO) within the Institute of Dentistry has a well developed team of staff together with your Course and personal tutors to help and guide you through the MSc programme.

You will receive a series of Handbooks which will outline the appropriate learning outcomes, academic requirements, and relevant assessment and deadlines for completion of coursework and submission. These are constantly updated and placed on QMPlus for continued reference.

Programme-specific rules and facts

N/A

How inclusive is the programme for all students, including those with disabilities?

The Institute of Dentistry will provide the following:

For specific learning disabilities:
- Specialist One to One Study Skills Support
- Regular support from a specialist one to one dyslexia tutor
- Lecture notes provided prior to the lecture either through QMPlus or via email
- Q-Review for lectures and/or permitting the student to record for lectures outside where Q-Review takes place eg lab sessions on Phantom Heads
- Specialist software with text-to-speech functionality to aid in concentration/fatigue problems

For physical disabilities:
- Speech recognition software allowing students to dictate without manually typing
- Some information regarding the lab/clinic environment and ensuring it is suitably accessible eg ground floor clinics/lift access to labs on higher floors/ramps etc.

The Student Support Office (SSO) has a well developed team who are keen to make sure that you are offered confidential,
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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, Quality & Assessments Officer |
| Person responsible for management of programme: | Prof. Paul Anderson |
| Date Programme Specification produced / amended by School / Institute Learning and Teaching Committee: | |
| Date Programme Specification approved by Taught Programmes Board: | 14 Nov 2022 |