Programme Title: Bachelor of Science Intercalated 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	Bachelor of Science Intercalated Oral Biology
Name of Interim Award(s)	Not applicable
Duration of Study / Period of Registration	1 year
QM Programme Code / UCAS Code(s)	B980
QAA Benchmark Group	
FHEQ Level of Award	Level 6
Programme Accredited by	Not applicable
Date Programme Specification Approved	27 Mar 2013
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

Programme Outline

The intercalated BSc (iBSc) oral biology (OB) is one year course designed for dental and medical students who have completed their 2nd , 3rd or 4th year of education. It will allow dental and medical students to get first hand experience of conducting a research project which will allow them to study the subject in greater depth than is possible in the BDS or MBBS courses. It will also enable students to experience research. In today's financial climate, it makes perfect sense to keep our best medical/dental students within our own institution rather than allowing them to intercalate elsewhere. There is, therefore, a need for QMUL to offer an iBSc OB course which will attract dental/medical/BVetMed students. Within the Dental School we have resources to introduce the students to a wide range of topics and skills at the fore front of oral biology research.

The course will consist of five modules. Module 1-3 will provide in-depth knowledge of: cell biology with special reference to oral cavity of humans and other mammals (M1); Biochemistry, Microbiology and Molecular Biology with special reference to the oral cavity of human and other mammals (M2) and hard tissues found in the oral cavity of human and other mammals. Furthermore, students will know the clinical applications of bio-materials that are currently researched and those in clinical trials (M3). All the modules will also develop the students' interest in, and critical appraisal of, current research in the hard tissue found in the oral cavity. Module 4 will be laboratory based practicals and Module 5 will be a research project. Attendance will be required at every module. Module 1-4 will be worth 15 credits each and module 5 will be worth 60 credits.

Programme Title: Bachelor of Science Intercalated Oral Biology

Aims of the Programme

This programme aims to provide an in-depth approach for exploring current concepts in human and mammalian oral biology. It will develop the students' interest in, and critical appraisal of, current research practices in oral biology. The students will develop the ability to write a coherent account of a specific research area of interest. Furthermore they will get first hand experience of preparing an oral presentation and in some cases the opportunity to write-up and submit their research in a peer-reviewed journal.

The programme will help to enhance the students' career options by giving them access to current thinking and concepts of oral biology and research in this fields.

Having undertaken a major research project as part of the degree, it will give students the insight to explore further their interest in research at post-graduate level.

What Will You Be Expected to Achieve?

Students who successfully complete this course will able to:

Academic Content:	
A 1	discuss the current concepts in oral biology topics.
A 2	obtain and assimilate up-to-date information on specific subjects of oral biology.
A 3	discuss how oral biology has been applied to dentistry
A 4	select and read scientific papers, critically assess the problem addressed; understand the basis of the methods used to investigate the problem and the significance of the results;
A 5	understand how cells interact with their micro-environment in health and disease.
A 6	describe the composition and functions of saliva, and the mechanism of saliva secretion
A 7	describe the human genome and the principles of techniques used to study genes.
A 8	describe the flora of oral cavity and recognise the role of anti-microbial peptides.
A 9	describe structure, composition and functions of dentine, enamel and dental pulp.
A 10	Describe and evaluate biomaterials and their use in modern dentistry.
A 11	explain the underlying principles of, and perform a range the common techniques in cell biology including cell culture, immunocytochemistry, ELISA technique.
A 12	explain the principles of and perform a range common techniques in molecular biology such as mRNA isolation, cDNA synthesis, restriction digestion and bacterial transformation.
A 13	be able to use research skills to investigate a research hypothesis.
A 14	recognise and understand the importance of health and safety rules of working in a research and clinical environment.

Programme Title: Bachelor of Science Intercalated Oral Biology

Disciplinary Skills - able to:	
B 1	prepare a coherent and critical account of current research areas;
B 2	present scientific data in varying formats to diverse audiences.
B 3	exercise health and safety rules of working in a research laboratory.
B 4	know how a knowledge of biological sciences can be used to plan and test a research hypothesis
B 5	take responsibility for ensuring compliance with current "Good Clinical Research Practices" guidelines.
B 6	explore in depth a specific area of research related to oral biology and write an extended dissertation on the project.
B 7	engage critically with and commit to continuous life-long learning.

Attributes:	
C 1	acquire and apply knowledge of oral biology in a rigorous way.
C 2	adapt their understanding of principles of oral biology to new and unfamiliar settings.
C 3	to learn continuously in a changing world
C 4	apply different forms of communications in different professional settings.
C 5	apply their analytical skills to investigate and test new hypotheses.
C 6	critically evaluate the reliability of different sources of published information.
C 7	work individually and in collaboration with others.
C 8	to develop information expertise

How Will You Learn?

The course will be delivered by a combination of:

* formal lectures each lasting about 90 min. Lectures will be given by expects in their fields.

*self directed learning.

* practical sessions where students will learn research skills.

*a series of tutorial sessions (arranged on personal basis) by the course organiser to discuss progress in assignments and assessments.

*each student will be asked to chose a research topic from a list provided by the course organiser covering various aspects of oral

biology. The student will be working on the project with a specifically assigned supervisor for that project. Students will exploit the skills they had learned during the practical sessions.

*each student will give a powerpoint presentation of their research data in front of their peer and staff members. They will learn how to make digital slides and speak to an audience.

*each student will also present their research data in the form of an A4 size poster.

*each student will submit a dissertation on their research which will give them a first hand experience of writing a thesis.

How Will You Be Assessed?

Each of the Modules 1-3 will be assessed by a written examiner of 2 hrs duration (70%) and a library based 3000 words long essay (30%).

Module 4 will assessed by portfolio of practical write-ups. The students will be asked to submit at least 6 reflective practical write-ups each 500-800 words long (70%) and a library based 3000 words long essay (30%). Attendance at practical sessions will be compulsory.

Module 5 will be assessed by a written thesis (40%), a powerpoint presentation (10%) and a poster presentation (10%). In addition, project supervisor will assess their conduct during their stay in the laboratory (10%).

The students will also face a viva with the external and an internal examiners on the research project and wider aspects of the course (30%).

How is the Programme Structured?

The programme will have FIVE modules. Modules 1-3 are taught modules, each consisting of 20-25 lectures. Each lecture will last for about 90min. Module 4 will be a research skills module which will teach students to carry out specific set of experiments to learn laboratory skills. Modules 1-4 will be worth 15 credits each.

Module 5 will be worth 60 credits and will require the students to spend 3-4 months on a research project supervised closely by a staff member. After finishing the project the students will submit their thesis before a specified deadline.

Academic Year of Study 1

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Introduction to Oral Biology	DIN6003	15	6	Compulsory	1	Semester 1
Oral biochemistry/microbiology and molecular biology	DIN6004	15	6	Compulsory	1	Semester 1

Programme Title: Bachelor of Science Intercalated Oral Biology

Module Title	Module Code	Credits	Level	Module Selection Status	Academic Year of Study	Semester
Hard tissue biology	DIN6005	15	6	Compulsory	1	Semester 1
Research skills	DIN6006	15	6	Core	1	Semester 1
Research project	DIN6007	60	6	Core	1	Semester 2

What Are the Entry Requirements?

All applicants will be expected to meet the following criteria:
• Completion of 2, 3 or 4 years of the MBBS, BDS or BVetMed programme (or equivalent programme at another institution in the UK or European Union);
• Good performance in the MBBS, BDS or BVetMed programme;
Students must have passed their current developmental year in order to take up an offer of a place on an intercalated programme. Students who have already been awarded a bachelor's degree will not be eligible to apply for an intercalated degree.

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.

Academic Support

The team running the programme has experience of running an intercalated BSc degree alongside MSc teaching, and the Centre for Clinical and Diagnostic Oral Sciences has extensive experience of intercalated teaching. Experienced teachers and mentors of dental undergraduates and postgraduates will provide teaching, academic guidance, and student pastoral support. The iBSc OB students will have their own academic advisor, and will have special teaching sessions specifically for them. These include introductory sessions about the course and revision-type sessions covering relevant parts of the curriculum already undertaken and dissertation guidance.

Before the start of research project students are required to undergo a building induction with the laboratory manager during which they learn about the building structure and various aspects of fire safety. This is followed by a more comprehensive laboratory induction about various aspects of health and safety. During this students learn more generic techniques such as use of class 2 cabinets, pipeting etc.

Programme Title: Bachelor of Science Intercalated Oral Biology

Programme-specific Rules and Facts

Please see attached programme regulations.

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.

Links With Employers, Placement Opportunities and Transferable Skills

Not applicable

Programme Specification Approval

Person completing Programme Specification	Dr Ahmad Waseem
Person responsible for management of programme	Dr Ahmad Waseem
Date Programme Specification produced/amended by School Learning and Teaching Committee	21 Jan 2013

Queen Mary University of London

Programme Title: Bachelor of Science Intercalated Oral Biology

Date Programme Specification approved by Taught Programmes Board	27 Mar 2013

Queen Mary University of London