PROGRAMME SPECIFICATION	

1	**Awarding Institution**	Newcastle University
2	**Teaching Institution**	Newcastle University
3	**Final Award**	**MSc in Restorative Dentistry**
4	**Programme Title**	**MSc in Restorative Dentistry – 2 year Programme**
5	**UCAS/Programme Code**	5008
6	**Programme Accreditation**	By the Specialist Advisory Committee in Restorative Dentistry as part of component speciality Training
7	**QAA Subject Benchmark(s)**	n/a
8	**FHEQ Level**	7
9	**Date written/revised**	22/04/10

10 Programme Aims

The aim of the course is to enable dentists to acquire advanced skills and knowledge in the field of Restorative Dentistry. The course is designed to provide the foundations for:

1. Enhanced general dental practice
2. Specialist practice (overseas)
3. Specialist training in Restorative Dentistry (the first 2 years of a 5 year programme)
4. Specialist training in the specialities of Endodontology, Periodontology and Prosthodontics (the first two years of a three year full-time or four year p/t programme)
5. Clinical academia
6. Community Dental Services

11 Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

Knowledge and Understanding

On completing the programme students should have:
A1 A systematic understanding of knowledge within and directly related to restorative dentistry, and a critical awareness of current problems and new insights, much of which is at, or informed by, the forefront of the field of study and area of professional practice;
A2. A comprehensive understanding of techniques applicable to restorative clinical practice and their own research;
A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline;

Teaching and Learning Methods

Teaching strategy

Teaching for A1 is mainly by pre-arranged seminars (approximately 100) which are completed during the first year of the course. Each seminar has a structured reading list prioritised where necessary into essential and recommended reading. These lists are reviewed annually. For items A2, A3 Students are given clinical teaching whilst treating patients with complex restorative problems and feedback is given on every clinic. Students engage in a research dissertation and statistics/research methodology course. Students are expected to attend the

Dental Hospital Clinical Audit meetings and diagnostic clinics.

Learning strategy

Students are expected to have read up for each seminar and to engage in seminar discussion. Each student has a research project and is allocated suitable patients for diagnosis and treatment.

Assessment Strategy

A1 is assessed at the end of the first year by set essays and a short answer paper. Further essays are set during the second year. Practice questions are set in the run-up to the written examination. Assessment of clinical knowledge is described below. The dissertation literature review is assessed internally at the end of the first year and the whole dissertation at the end of the second year.

Intellectual Skills

On completing the programme students should be able to:

B1. Evaluate critically current research and advanced scholarship in the discipline

B2 Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

B3 Synthesise clinical findings to make a diagnosis and treatment plan or plan patient follow-up

B4 Appreciate their limitations and to take advice or refer a patient when appropriate

Teaching and Learning Methods

As for A1-A3 above. B4 developed clinically.

Assessment Strategy

As for knowledge and understanding and practical skills

Practical Skills

On completing the programme students should be able to:

C1 Record a history and examine patients with complex restorative requirements

C2 Provide treatment for restorative patients with moderate to difficult requirements

C3 Articulate casts, diagnostically wax and construct indirect restorations

C4 Use statistical packages

Teaching and Learning Methods

One to one teaching on treatment clinics and diagnostic clinics (C1, C2). Supervised laboratory work (C3). A statistical course and hands on sessions when analysing the research project (C4).

Assessment Strategy

Students' clinical skills are evaluated summatively at the end of the first term in the Clinical Skills Unit; a satisfactory performance on the clinical simulator is needed before progressing to clinical activity. A formative grade is given for clinical activity which is also evaluated summatively by the internal examiners at the end of years 1 and 2 (C1 and C2). A log of a completed 'best case' is presented along with the patient at the end of year 2. The research project is normally examined at the end of year 2.

Transferable/Key Skills

On completing the programme students should be able to:

D1 Use appropriate IT skills for data analysis and documentation

D2 Use efficiently the library and other information retrieval systems

D3 Realise that academic and clinical skills need to be constantly reviewed challenged and updated through continuing professional development in which you should play an active part in both receipt and delivery

D4 Work in harmony with peers, support staff and teachers with a view to becoming a

team leader.

Holders of the MSc will have the qualities and transferable skills necessary for employment / further study requiring: the exercise of initiative and personal responsibility;

- decision-making in complex and unpredictable situations; and
- the independent learning ability required for continuing professional development.

Teaching and Learning Methods

D 1, 2 Word processing, library skills and Medline during induction week. Advanced word processing and use of Endnote bibliographic software during term 2 or 3 in conjunction with literature review writing. Statistical course (term 2) and statistics applied to research project (terms 2-6). Teaching experience of undergraduates organised during terms 2 and 3 of second year (D3). Students expected to organise their own clinical practice to meet assessment targets (D4). Students encouraged to lead some of their seminars in Dental Materials Science (D4).

Learning strategy

Problem based in relation to tackling research project, presenting seminars and developing clinical practice.

Assessment Strategy

Assessment of research project described in C. Constructive feedback on clinical performance, clinical teaching and seminar presentation.

12 Programme Curriculum, Structure and Features

Basic structure of the programme

The foundation for clinical and laboratory practice consists of three clinical skills courses completed during the first term. There is also a laboratory course which the student must complete satisfactorily. Students must obtain a satisfactory standard in the Fixed and Removable Clinical Skills programme before being allowed to treat patients under supervision from the start of second term. During terms 2, 3 and 4 students see patients for treatment in the following clinical areas : Prosthodontics (including Conservation), Endodontics and Periodontics. During terms 5 and 6 general restorative patients are seen for treatment (3 sessions per week) and to consolidate experience in readiness for the clinical presentation and viva voce examinations in September of the second year. In addition, Diagnostic Clinics are specifically timetabled for full-time students as are compulsory undergraduate teaching sessions during the second year.

The seminar programme is based on 7 compulsory elements:

Conservation and Fixed Prosthodontics
Complete Prosthodontics
Dental Materials Science
Endodontology
Interrelated subjects
Periodontology
Removable Partial Prosthodontics.

With the exception of Complete Prosthodontics the seminars are completed in early June of the first year to allow 3 weeks revision time. A satisfactory performance in the written papers in July is necessary to progress to year two.

The research project is spread across both years. During the first year aims, literature and pilot studies must be completed. It is a requirement for progression from year one to two that the draft literature review be handed in for assessment and comment at the end of July of the first year. Practical work may be spread between both years and writing-up completed by the beginning of August of the second year.

Key features of the programme (including what makes the programme distinctive)

The two year programme (6 terms) comprises three main areas:

1. Supervised clinical and laboratory practice involving treatment planning, clinical procedures and technical work for selected cases, including some complex treatments

2. Review of the clinical and scientific evidence base for Restorative Dentistry by means of seminars, lectures and practical classes

3. A research project and dissertation demonstrating a candidate's application of scientific method to a problem of relevance (directly or indirectly) to Restorative Dentistry.

Students can expect a high degree of clinical exposure under expert tuition. There is excellent technical support and students are encouraged to liaise with the laboratories as well as do their own mountings, trial adjustments and diagnostic waxing. Students are not expected to undertake laborious repetition of technical procedures. The dissertation for the research project is written up as a paper for submission to a journal in combination with a full introduction and literature review. This approach will facilitate the candidate getting the work published and the scrutiny of the research log book will encourage good record keeping.

The course may be taken on a part-time basis by dentists working locally in practice, hospital or the community providing they are able to present some of the work carried out in practice as part of their clinical requirements.

Programme regulations (link to on-line version)

http://www.ncl.ac.uk/regulations/

13 Criteria for admission

Entry qualifications

A dental degree recognised by the GDC as being at least sufficient for the purposes of temporary registration.

Admissions policy/selection tools

Applicants are preferred with two or more years of experience post qualification at the start of the programme. Applicants are selected according to the quality of their application and previous experience. Where possible we try and achieve an equal mix of EC and overseas students.

Applicants wishing to use the MSc programme as part of Higher Specialist Training must be in possession of MFDS/MJDF and have a National Training Number provided by the Postgraduate Dean of Dentistry. Training programmes in the Monospecialities (Endodontics, Periodontology and Prosthodontics) have been approved by the Specialist Advisory Committee. These started in September 2003 with admission through competitive selection.

Students may not transfer from the MSc course to a Higher Specialist Training programme.

Non-standard Entry Requirements

Students must have the required immunisation against Hepatitis B and must not have any disease which would constitute a hazard to their patients. Potential applicants are strongly advised to check their Hep B immunisation status and that they are not infective with TB, Hep B, Hep C or HIV before applying for the course. Students will not be allowed clinical access by the Newcastle Hospitals NHS Foundation Trust until they have been cleared by Occupational Health and have GDC registration (either full or temporary) which must be maintained for the duration of the programme . Students will need to liaise with the Trust's Human Resources Department to comply with these requirements. Compliance with these requirements is essential to maintain student registration with the University.

Additional Requirements

Level of English Language capability

Overseas and EC students need at least IELTS 6.5 (in each section) or TOEFL 575, computer based 233.

14 Support for Student Learning

Induction

During the first week of the first term students attend an induction programme. New students will be given a general introduction to University life and the University's principle support services and general information about the School and their programme, as described in the Degree Programme Handbook. New and continuing students will be given detailed programme information and the timetable of lectures/practicals/labs/ tutorials/etc. The International Office offers an additional induction programme for overseas students (see http://www.ncl.ac.uk/international/arrival/jan/index.phtml

Study skills support

Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual projects.

Numeracy support is available through Maths Aid. Further details are available at:

http://www.ncl.ac.uk/library/news_details.php?news_id=159 Help with academic writing is available from the Writing Centre. Details can be obtained from Alicia.Cresswell@ncl.ac.uk

Academic support

The initial point of contact for a student is with a lecturer or element leader, or their tutor (see below) for more generic issues. Thereafter the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Staff-Student Committee (within the Curriculum Committee), and/or at the Board of Studies.

Pastoral support

All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. Details of the personal tutor system can be found at http://www.ncl.ac.uk/undergraduate/support/tutor.phtml
In addition the University offers a range of support services, including the Student Advice Centre, the Counselling and Wellbeing team, the Mature Student Support Officer, and a Childcare Support Officer, see
http://www.ncl.ac.uk/undergraduate/support/welfare/index.phtml

Support for students with disabilities

The University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies. Dentistry requires a high degree of manual skill, co-ordination and visual acuity so students must be physically able to carry out all the tasks normally done by dentists. The University Disability Support Service has specialist staff to give advice and guidance. Applicants who may have any doubts about their suitability for the course should contact the Dental School for advice before submitting an application.

Information on the Disability Support Service is at:http://www.ncl.ac.uk/disability.services/support/

The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources), and Information Systems and Services, which supports campus-wide computing facilities, see
http://www.ncl.ac.uk/undergraduate/degrees/facilities/index.phtml

All new students whose first language is not English are required to take an English Language Proficiency Test. This is administered by INTO Newcastle University Centre on

behalf of Newcastle University. Where appropriate, in-sessional language training can be provided. The INTO Newcastle University Centre houses a range of resources which may be particularly appropriate for those interested in an Erasmus exchange. See http://ncl.ac.uk/langcen/index.htm

15 Methods for evaluating and improving the quality and standards of teaching and learning

Element reviews
All elements are subject to review by questionnaires which are considered by the Curriculum Committee. Changes to, or the introduction of new, elements are considered at the School Teaching and Learning Committee and at the Board of Studies. Student opinion is sought at the Curriculum Committee. New elements and major changes to existing elements are subject to approval by the Faculty Teaching and Learning Committee.

Programme reviews
The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to Faculty Teaching and Learning Committee.

External Examiner reports
External Examiner reports are considered by the Curriculum Committee and Board of Studies. The Board responds to these reports through Faculty Teaching and Learning Committee. External Examiner reports are shared with institutional student representatives, through the Staff-Student Committee.

Student evaluations
All elements, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Staff-Student Committee, and the Board of Studies.

Mechanisms for gaining student feedback
Feedback is channelled via the Staff-Student Committee and the Board of Studies.

Faculty and University Review Mechanisms
The programme is subject to the University's Internal Subject Review process, see http://www.ncl.ac.uk/aqss/qsh/internal_subject_review/index.php

Accreditation reports
Until February 2001 the course was accredited for the purpose of approved training in respect of FDS/MFDS. Now that the MFDS is considered to mark the end of General Professional Training we have aligned the MSc programme with Monospeciality training (Endodontics, Periodontics, Prosthodontics). The Specialist Advisory Committee gave initial approval for the Monospeciality programmes in 2003 and confirmed its approval following its visit in September 2007.

Additional mechanisms
Students and their research supervisors complete an evaluation form of research progress in May - June of each year which is forwarded to the Curriculum Committee.

16 Regulation of assessment

Pass mark
Our marking system is the School of Dental Sciences is based on four grades for all academic and clinical work: Unsatisfactory (U), Borderline (B), Satisfactory (S) and Merit (M).

<50	Fail (equivalent to an overall U grade)
50-59	Pass (equivalent to an overall S grade)
60-69	Pass with Merit (equivalent to scoring 3 S grades and 2 M grades in the five sections)
70+	Pass with Distinction (equivalent to scoring 4 M grades in the five sections)

Course requirements
The course consists of two main parts: the taught course and the research project. Both parts must be completed satisfactorily to attain the degree. The taught component has both clinical and academic elements.

Research Dissertation: this comprises a literature review, which must be handed in for formative assessment at the end of the first year, and a manuscript for a targeted research journal. The soft bound dissertation is summatively assessed at the end of the second year as is the research log book.

Clinical work, comprising four general restorative cases, is assessed by the internal examiners at the end of the first year and a second group of four patents assessed at the end of the second year. One restorative case, fully documented with a log diary, is seen by the external examiner at the end of the second year. A Monospeciality trainee at the end of the second year would be expected to submit 4 cases to the internal examiners showing evidence of expertise in the relevant Monospeciality.

Academic work, comprising mainly seminars, is examined by written paper (a long answer paper and a short answer paper) at the end of the first year and by viva voce at the end of the second year. Progression from first to second year is dependent on obtaining an aggregate pass for the two papers.

Progression is subject to the University's Masters Degree Progress Regulations, Taught and Research (http://www.ncl.ac.uk/calendar/university.regs/tpmdepr.pdf) and Examination Conventions for Taught Masters Degrees (http://www.ncl.ac.uk/calendar/university.regs/tpmdeprexamconv.pdf).

Role of the External Examiner
An External Examiner, a distinguished member of the subject community, is appointed by Faculty Teaching and Learning Committee, after recommendation from the Board of Studies. The External Examiner is expected to:

- See and approve examination papers
- Moderate examination and coursework marking
- Attend the Board of Examiners
- Report to the University on the standards of the programme

In addition, information relating to the programme is provided in:

The University Prospectus (see http://www.ncl.ac.uk/undergraduate/)

The School Brochure (contact enquiries@ncl.ac.uk)

The University Regulations (see http://www.ncl.ac.uk/calendar/university.regs/)

The Degree Programme Handbook (see http://medical.faculty.ncl.ac.uk/dentistry/MSc_Courses/Restorative_Dentistry/)

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.

Annex

Mapping of Intended Learning Outcomes onto Curriculum/Elements

		Intended Learning Outcomes			
Element	**Type**	**A**	**B**	**C**	**D**
Conservation and fixed prosthodontics	Compulsory	1, 2	1, 3, 4	1, 2, 3	1, 2, 3, 4
Periodontology	Compulsory	1, 2	1, 3, 4	1, 2, 3	1, 2, 3, 4
Endodontics	Compulsory	1, 2	1, 3, 4	1, 2, 3	1, 2, 3, 4
Partial Dentures	Compulsory	1, 2	1, 3, 4	1, 2, 3	1, 2, 3, 4
Complete Dentures	Compulsory	1, 2	1, 3, 4	1, 2, 3	1, 2, 3, 4
Research Dissertation	Compulsory	3	1, 2	4	1, 2
Dental Materials Science	Compulsory	1, 3	1, 2	4	1, 2, 3, 4
Interrelated Subjects	Compulsory	1, 2	1, 3, 4	1, 2	1, 2, 3, 4