### **Programme Specification**



# A statement of the knowledge, understanding and skills that underpin a taught programme of study awarded by The University of Sheffield

1	Programme Title	Diagnostic Oral Pathology
2	Programme Code	DENT12
3	JACS Code	A400
4	Level of Study	Postgraduate
5	Final Qualification	MMedSci
6	Intermediate Qualification(s)	PG Certificate; PG Diploma
7	Teaching Institution (if not Sheffield)	Not applicable
8	Faculty	Medicine, Dentistry and Health
9	Home Department	School of Clinical Dentistry, Oral and Maxillofacial Pathology
10	Other Department(s) involved in teaching the programme	None
11	Mode(s) of Attendance	Full-time
12	Duration of the Programme	1 year
13	Accrediting Professional or Statutory Body	Not applicable
14	Date of production/revision	January 2010 / April 2013/ January 2016/ January 2017/February 2018

#### 15. Background to the programme and subject area

Oral Pathology is a specialism both of pathology and of dentistry. Pathology is the laboratory science dedicated to advancing understanding of the causes and nature of disease and histopathology is that branch of pathology involving the study of microscopical preparations of tissues; this can lead to improved knowledge of the changes that may take place in these tissues in response to various injurious agents and to the identification of specific changes that can be categorised as a particular disease or disorder. The latter aspect forms the main focus of the course in Diagnostic Oral Pathology, which is concerned specifically with the diseases and disorders that affect the tissues and organs of the oral cavity and its related structures. It thus covers the causes, pathogenesis, natural history, distribution, diagnosis and prognosis of such diseases and disorders and has important implications for understanding their clinical signs and symptoms, their response to treatment, their management and their prevention. The relationship of oral pathology to other clinical disciplines involved in aspects of the management of patients with oral diseases and disorders is therefore both close and significant; hence its place as a specialism within the field of dentistry.

This course builds upon the basic understanding of pathology and oral pathology that will have been gained at undergraduate level by dental graduates and is particularly suited to those who have obtained some relevant postgraduate experience in a related clinical discipline. The Master of Medical Science degree in Diagnostic Oral Pathology provides a suitable basis for those who may wish to pursue further studies in oral pathology or to better inform their training in related clinical disciplines. Thus potential employment prospects include openings in research, teaching and clinical work where a grounding in diagnostic oral pathology might be considered essential, desirable or otherwise of value.

The Oral & Maxillofacial Pathology Unit combines the functions of research, teaching and laboratory diagnostic work. Over 3000 specimens for diagnosis are received each year and the departmental archives now exceed 60,000 cases. Research is one of the School's key activities. RAE 2014: in the recent research assessment exercise 92% of the Dental School's research was graded as `world-leading´ or `internationally excellent´. The School was given an 'excellent' (23/24) rating in the last (2001) QAA Subject Review exercise and in a recent independent review of teaching was described an 'an excellent school of international calibre.'

For the hospital service aspects of its activities the Unit forms part of the Diagnostic and Surgical Services grouping within the Charles Clifford Dental Hospital and the Sheffield Teaching Hospitals NHS Foundation Trust. It also has established links with the Department of Pathology in the adjacent Royal Hallamshire Hospital. Further information can be found on the web-site for the School of Clinical Dentistry at

#### 16. Programme aims

#### General aims of the MMedSci (Diagnostic Oral Pathology) programme:

- To provide dental graduates with the opportunity to enhance their academic, scientific and clinical skills as part of their career development;
- To provide high quality teaching that is informed and invigorated by the research and scholarship of departmental staff and is alert to the benefits of student-centred learning;
- To introduce or reinforce the principles of scientific research methodology;
- To foster the further development of transferable analytical and communication skills;
- To provide the opportunity to acquire advanced knowledge, foster critical and impartial analysis of scientific and clinical information, and further develop the appreciation of the benefits of continuing professional education;
- To build on the student's foundation in the basic and clinical sciences in order to increase their understanding of oral disease processes and the clinical and public health measures used in disease management;
- To enable students to maximise their potential in all aspects of the course;
- To assess students over a range of knowledge, understanding and skills, and to identify and support academic and clinical excellence.

#### 17. Programme learning outcomes

On completion of the MMedSci course it is expected that students will have developed their knowledge and understanding, skills and other attributes beyond the level of their first degree to fulfil the following learning outcomes.

#### Knowledge and understanding:

K1	Broad knowledge and conceptual understanding of a wide range of oral pathological conditions.
K2	Sound knowledge and critical systematic understanding of those oral pathological conditions that commonly require diagnosis by histopathological methods.
K3	Sound knowledge and comprehensive understanding of the roles of other members of the health care team in the execution of procedures involved in achieving a successful outcome to the diagnostic process.
K4	Sound knowledge and comprehensive understanding of the common laboratory methods used to prepare oral diagnostic material for histopathological examination.
K5	Sound knowledge and critical understanding of the effective transmission of diagnostic information.
K6	Sound knowledge and comprehensive understanding of the main research tools and methods used to advance the practice of diagnostic oral pathology.
K7	Critical awareness of current problems in oral pathology and sound knowledge of the sources of up-to-date information on oral pathological conditions and related scientific and clinical disciplines.
K8	Broad knowledge and understanding of the principles underpinning effective teaching and learning.
K9	Broad knowledge and understanding of the principles underpinning the presentation of material at scientific meetings and for publication.

Skills and other attributes:		
S1	A high level of competence and sound judgement in the practical microscopical diagnosis of common and significant oral pathological lesions and conditions.	
S2	A high level of competence, sound judgement and initiative in determining the next steps necessary to resolve a diagnosis for specimens beyond their immediate capabilities.	
S3	A high level of competence and self-direction in obtaining relevant information speedily to assist in the establishment or confirmation of a diagnosis.	
S4	A high level of competence in communicating clearly with other members of the health care team involved in the diagnostic process.	

S5	Practical familiarity with the common laboratory methods used in the preparation of material for oral histopathological examination.
<b>S</b> 6	Practical familiarity with such IT skills as word-processing, e-mail and use of the internet.
S7	Skills in acquiring, using and critically evaluating evidence and information about conditions encountered in the subject area of oral pathology.
S8	Competence in transmitting information to more junior students in a way that enhances their learning experience.
S9	Competence in preparing information suitable for presentation to their peers at a scientific meeting and for submission to a scientific journal.
S10	Competence at carrying out individual study and a short original research project involving the ability to identify problems, gather information, think analytically, resolve difficulties, critically analyse source material, choose appropriate methodologies, construct a hypothesis, sustain a logical argument and present the results of these processes clearly in both oral and written form.
S11	Ability to acknowledge their own limitations and to use this as a stimulus to continually update their knowledge and skills to a high level.

#### 18. Teaching, learning and assessment

#### Development of the learning outcomes is promoted through the following teaching and learning methods:

Induction period: After allocation and discussion of the Course Handbook, the initial four weeks of the course is directed at providing the student with an introduction to the structure and methods of the course and ensuring that they receive appropriate orientation to the regulations and procedures of the University, Faculty, School, NHS Trust and Dental Hospital. This period is also utilised to ensure that the student has the requisite level of appreciation of the study skills, IT skills and knowledge of basic general and oral pathology necessary to benefit fully from the course (S11).

Staff-led seminars: A series of Seminars is used to provide essential background and practical information on technical procedures and aspects of diagnostic oral pathology (K3, K4, K6). In addition, students will be either required or encouraged to attend prescribed seminars such as those available from the Dental School's research seminar programme and the Department of Pathology's MRCPath training programme, Diagnostic Pathology seminars and Research seminars (K1-K9).

Student-led seminars: "Journal Club" sessions involve individual students being allocated oral pathology-related papers from the scientific literature for study, analysis and then encapsulated verbal presentation to other students and staff for further discussion. The papers used are either diagnostically-based or research-based or both (K1-K9) (S7-S9). "Red Box" seminars are each based on exemplar preparations of individual oral pathological lesions or conditions from the Unit's archival collection; these are made available to students one week in advance. Students are asked to present these cases to their colleagues and staff and to participate fully in the discussion of cases presented by their colleagues (K1-K5, K7-K9) (S1-S4, S9).

Practical laboratory techniques: Each student has the opportunity to practice cutting sections from paraffinembedded, soft and hard tissues and to perform a prescribed set of routine and special stains on paraffin-embedded sections. In addition, they make themselves familiar with equipment available and technical procedures being undertaken within the Oral & Maxillofacial Pathology and core research laboratories for diagnostic and research purposes (K3, K4-K6) (S5, S11).

Lectures: These are not a formal part of the course but dependent upon a student's background and interest they may be required or encouraged to attend the lectures on oral pathology that form part of the course for senior dental undergraduates (K1-K8).

Literature review: Each student completes a critical review on a selected topic in oral pathology under guidance from a member of academic staff. The review must be fully referenced and submitted in word-processed form (K1-K9) (S6, S7, S9).

Dissertation: In discussion with academic staff each student chooses a project that will culminate in the presentation of a dissertation. This must involve the pursuit of original work based upon an approved protocol which should clearly state the objectives, key references, a broad outline of the methods involved, an estimate of resources required and an estimate of the time involved. The final version of the dissertation must be fully referenced, word processed and bound (K1-K9) (S6, S7, S9-S11).

Independent study: All of the above teaching and learning methods involve an element of independent study, preparing work for presentation, following up on aspects that become apparent in laboratory or diagnostic practice,

and pursuing topics that are relevant to oral pathology but may not be covered formally in course material. Students are encouraged to make full use of the opportunities presented by having access to the departmental archival collection of diagnostic material and literature as well as those routinely available more widely in the Dental School, Dental Hospital or University, or for which special arrangements may be possible (K1-K9) (S1-S11).

## Opportunities to demonstrate achievement of the programme learning outcomes are provided through the following assessment methods:

Formative assessment: There is an initial formative assessment at the end for the first four weeks of the course which may include a short MCQ paper (K1, K2), a short essay question (K1-K7), a practical diagnostic test ((K1,K2, K5) (S1, S2) and an oral examination (K1-K9) (S8, S9). This is to provide a benchmark of the student's existing abilities and to identify areas of knowledge or skill which might require particular attention. Thereafter, formative assessments occur during the periods of supervised reporting and as a result of the literature review and student-led seminars. These assessments enable student's abilities to be monitored in terms of practical diagnostic skills, knowledge of oral pathological conditions, critical analysis of published papers and both report writing skills and oral presentation skills (K1-K9) (S1-S11). They provide an opportunity to identify and rectify areas of weakness and to encourage the further development of areas of strength or special interest.

Summative assessment: The various modules are assessed by an appropriate combination of course work (written and oral), short answer questions and essay questions to test knowledge (K1-K9) and of practical diagnostic tests to determine the level of that skill achieved (S1-S4). Both also assess written communication skills (S8, S9). The written dissertation and an accompanying oral examination based on the dissertation assess research capabilities, communication and organisation skills and other transferable skills (K4, K5, K7, K9) (S5-S11).

#### 19. Reference points

#### The learning outcomes have been developed to reflect the following points of reference:

Diagnostic and research interests of departmental staff

Technical methods available in the department

Diagnostic material available to the department

The Mission Statement of the University of Sheffield, as presented in the Corporate Plan <a href="http://www.sheffield.ac.uk/ourplan/">http://www.sheffield.ac.uk/ourplan/</a>

The Learning and Teaching Strategy of the University of Sheffield https://www.sheffield.ac.uk/staff/learning-teaching/our-approach

Appropriate qualification descriptors contained in the QAA Framework for Higher Education Qualifications in England Wales and Northern Ireland – January 2001

The General Dental Council's Life Long Learning Statement https://www.gdc-uk.org/professionals/cpd

It is expected that dentally qualified students entering this course will have already fulfilled the learning outcomes reflected in the benchmarking statements of the Quality Assurance Agency for Higher Education in England and Wales (<u>http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx</u>) with regard to dentistry. The General Dental Council's (<u>http://www.gdc-uk.org/</u>) document <u>"The First Five Years – Third Edition"</u>

#### 20. Programme structure and regulations

The programme is divided into two main components. The modules listed (ORP606, ORP607, ORP608, DEN616, ORP609, ORP610, ORP611 and ORP6021) are compulsory for all students and form both the basic foundation of the course and the more advanced learning including instruction on research techniques and their applications. Where appropriate, the modules are arranged in a developing order of difficulty.

Please refer to the <u>Programme Regulations</u> and the <u>General University Regulations</u> for detailed information about the structure of programmes and regulations concerning assessment.

#### 21. Progression through the programme structure

The sequence of some course components is based on an initial assessment of the individual student's abilities and previous experience. For some other components (eg the "Red Box" student-led seminars) material is introduced in a graded fashion so that more difficult diagnostic problems generally are not utilised until later stages of the course.

#### 22. Criteria for admission to the programme

A dental degree and some relevant postgraduate clinical experience. Full information can be found at <a href="http://www.sheffield.ac.uk/dentalschool/masters/oral\_pathology">http://www.sheffield.ac.uk/dentalschool/masters/oral\_pathology</a> . International students whose first language is not English should also hold an appropriate English Language Qualification. We require an IELTS score of 6.5 overall with a minimum of 5.5 in each component or a TOEFL equivalent.

#### 23. Additional information

The Dental School in Sheffield was first established in the early 1900s and Sheffield University has been awarding a degree in Dental Surgery since 1922. The current Dental School building was opened in 1992.

On the ground floor of the School you will find our 120-seat lecture theatre which was upgraded in 2007 and is equipped with up-to-date audio visual equipment. There are also six seminar/tutorial rooms, an IT Suite with 20 workstations and an internet café / common room. If you need it, the School has wireless connectivity.

On the second floor of the School there is a 54-unit recently upgraded Clinical Skills Laboratory with a dental chair for demonstrations via a live video link and computers offering computer aided learning packages. In the annexe to the School, we have a newly refurbished 40-unit Dental Technology Laboratory with associated materials processing facilities.

In 2009 the School opened a new wing which houses purpose-built and state of the art research laboratories for cell and tissue culture, microbiology, electron microscopy, histology, histochemistry and immuno-cytochemistry, biochemistry, molecular biology, proteomics and materials science.

The Dental School is connected to the recently redeveloped Charles Clifford Dental Hospital. Completed in 2009, the redevelopment included the upgrading of many areas within the hospital including new clinical facilities.

The various clinical departments are equipped with dental units in both open clinics and small side clinics. Facilities for treatment under inhalation anaesthesia as well as conscious sedation and recovery are available. The Dental Hospital has a well equipped radiography department and we also have our own oral pathology laboratories which provide support services for all clinical areas. A dental production laboratory supports both undergraduate and postgraduate teaching and learning as well as providing National Health Service treatment. All these clinical facilities are used by undergraduate and postgraduate dental students. All students are provided with clinical attire. Changing rooms and canteen facilities are available in the basement of the Dental Hospital.

For further information prospective students are directed to the School web pages at http://shef.ac.uk/dentalschool/

This specification represents a concise statement about the main features of the programme and should be considered alongside other sources of information provided by the teaching department(s) and the University. In addition to programme specific information, further information about studying at The University of Sheffield can be accessed via our Student Services web site at <a href="http://www.shef.ac.uk/ssid">www.shef.ac.uk/ssid</a>