

Programme Specification

A statement of the knowledge, understanding and skills that underpin a taught programme of study leading to an award from The University of Sheffield

1	Programme Title	Paediatric Dentistry
2	Programme Code	DENT59
3	JACS Code	A400
4	Level of Study	Postgraduate
5a	Final Qualification	DClinDent in Paediatric Dentistry
5b	QAA FHEQ Level	M (PG Level 8)
6a	Intermediate Qualification(s)	A PG Certificate / Diploma / MMedSci (Year 1) and a MClinDent (Year 2)
6b	QAA FHEQ Level	M (PG Level 8)
7	Teaching Institution (if not Sheffield)	Not applicable
8	Faculty	Health
9	Department	Clinical Dentistry
10	Other Departments involved in teaching the programme	ScHaRR
11	Mode(s) of Attendance	Full-time
12	Duration of the Programme	3 to 4 years
13	Accrediting Professional or Statutory Body	None
14	Date of production/revision	February 2018, March 2020, June 2023, October 2024

15. Background to the programme and subject area

Paediatric Dentistry is the major specialism in dentistry concerned with the management of oral disease in children and adolescents. The Doctorate in Clinical Dentistry (DClinDent) course is aimed at dental surgeons holding a primary dental degree with at least two years' experience in hospital or general dental practice and is based primarily in the Academic Unit of Oral Health, Dentistry and Society, with clinical activities in the Charles Clifford Dental Hospital, which is part of the Sheffield Teaching Hospitals NHS Foundation Trust.

The Academic Unit of Oral Health, Dentistry and Society is one of five in the School of Clinical Dentistry, the others being: Dental Hygiene and Dental Therapy, Oral and Maxillofacial Pathology, Restorative Dentistry, and Oral and Maxillofacial Pathology. The Unit teaches on the undergraduate dental degree course (BDS), covering orthodontics, paediatric dentistry, Dental Public Health, Psychology, Sociology and Behavioural Science, Outreach, and Primary Care.

The School of Clinical Dentistry is directly connected to the Charles Clifford Dental Hospital (CCDH), where all patient treatment is carried out. The Department of Paediatric Dentistry in CCDH has a joint University and Hospital function and therefore is responsible for the treatment of patients needing a wide variety of treatment. It consists of 18 chair clinic, which was refurbished in 1999. The hospital also has extensive dental technology laboratory facilities on its third floor, which provide a service for patients. CCDH also provides training opportunities for dental nurses, hygienists and therapists, the latter being provided by the Diploma programme in Dental Hygiene and Dental Therapy.

This course builds upon the basic understanding of dentistry that will have been gained at undergraduate level by dental graduates and is particularly suited to those who have obtained some general postgraduate experience. Potential employment prospects include openings in clinical work, research and teaching and further training and experience to specialist standard.

16. Programme aims

Upon completion of this programme, students will demonstrate:

- A systematic acquisition and understanding of a substantial body of knowledge and a critical awareness of the issues that determine successful clinical outcomes, informed by the forefront of knowledge in paediatric dentistry.
- To provide sufficient knowledge, skills, abilities and stimulation to develop appropriate attitudes to enable independent practice of paediatric dentistry.
- The ability to conceptualise, design and implement a research project that will increase understanding at the forefront of the discipline.
- A personal responsibility for independent learning, autonomous decision-making in complex and unpredictable situations resulting in sound judgements, planning and implementing tasks at a professional level.
- An ability to communicate clearly and professionally to specialist and non-specialist audiences and a willingness to maintain and extend these attributes through Continuing Professional Development.

The level of training provided will contribute to the requirements of a specialist in paediatric dentistry as outlined by the General Dental Council (GDC) but will not automatically lead to entry to the GDC specialist list.

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

17. Programme learning outcomes

Knowledge and understanding of:

KIIOW	leuge and understanding of.
Candi	dates for DClinDent, MClinDent, PG Diploma and PG Certificate will:
K1	Describe the basics of obtaining a comprehensive history and performing a dental examination.
K2	Explain the development of the dentition and facial growth.
K3	Understand the benefit of prevention, as part of a holistic, comprehensive treatment plan.
K4	Know the available treatment modalities for managing dental conditions in the developing dentition.
K5	Synthesise the principles of consent.
K6	To develop a scientific attitude and an inquiring mind.
K7	Demonstrate the principles of clinical audit and service evaluation.
In add	lition, candidates for DClinDent, MClinDent in Paediatric Dentistry will:
K8	Assemble the fundamental principles of treatment planning for children and adolescents.
K9	Appraise the evidence base for treatment approaches in paediatric dentistry.
K10	Appraise how research activity can inform clinical practice.
In add	lition, candidates for DClinDent in Paediatric Dentistry:
K11	Evaluate how multi-disciplinary approach to management of the child and adolescent.
K12	Understand the importance of hypothesis-setting and design of suitable projects to address questions relating to the practice of paediatric dentistry.

Skills	s and other attributes:
Cand	idates for DClinDent, MClinDent, PG Diploma and PG Certificate in Paediatric Dentistry will:
S1	Be able to evaluate the need for treatment.
S2	Be able to diagnose diseases and anomalies of the dentition.
S3	Maintain high ethical standards.
S4	Be able to complete an audit or service evaluation project.
S5	Demonstrate a commitment to continuing professional development.

In add	dition, candidates for DClinDent, MClinDent and PG Diploma in Paediatric Dentistry will:				
S 6	Be ready to enhance clinical skills and understanding by further study and be prepared to aid others in their acquisition of understanding and expertise.				
S7	Be prepared to modify skills to the changing needs to the individual and the community.				
S 8	Be proficient in the delivery of preventive care.				
In add	In addition, candidates for DClinDent and MClinDent in Paediatric Dentistry will demonstrate:				
S9	An aptitude to communicate clearly and effectively with patients, their carers and the other members of the dental team.				
S10	The capacity to critically assess scientific papers and available evidence, such as guidelines, using a variety of information sources.				
S11	Some ability to formulate an evidence-based treatment plan and predict its course.				
S12	The ability to execute simple and complex treatment procedures, in line with current knowledge and with valid consent.				
S13	Some ability to prepare oral and written presentations of clinical and research findings.				
S14	The capacity to manage dental emergencies, including dental trauma.				
Cand	Candidates for the DClinDent will demonstrate:				
S15	Competence in developing a holistic treatment plan at specialist level.				
S16	Professional judgement when implementing clinical solutions when responding to problems.				
S17	The potential to become an effective and efficient leader of a multi-professional team practising Paediatric Dentistry.				
S18	Some ability to write a concise and coherent report of their chosen project.				
S19	interpret research data and formulate conclusions.				
S20	Some understanding of how to interpret research data and formulate conclusions for their chosen research project.				
S21	The capacity to learn independently in familiar and unfamiliar situations with open-mindedness and in the spirit of critical enquiry.				

18. Teaching, learning and assessment

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

1. **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, Department, 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 dentistry and paediatric dentistry necessary to benefit fully from the course (K1).

2. **Staff-led seminars**: A series of seminars is used to provide essential background and practical information on clinical and other procedures used in paediatric dentistry and to allow group discussion. 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. (K4, K5, S6, S7, S10).

3. **Student-led seminars**: "Journal Club" sessions involve individual students' oral presentation of critical assessment of paediatric dentistry-related scientific articles or case-based discussions to other students and staff. Presentation of the scientific literature allows the student to develop critical appraisal and oral presentation skills, while case-based discussions allow them to demonstrate problem-solving and reflection of their clinical management. (K3, S6-S8, S13).

4. **Practical clinical and laboratory techniques**: focus on the development of practical skills appropriate to the clinical situation or the background laboratory support for these. Students have to demonstrate sufficient knowledge and skill before undertaking invasive clinical procedures on patients (K1-K3, S1-S5).

5. **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 paediatric dentistry that form part of the

course for dental undergraduates (K1, K2).

6. **Assignments**: Each student completes critical review on selected topics in Paediatric Dentistry. The reviews must be fully referenced and submitted in word-processed form. (K1-12, S9, S10, S13).

7. **Research project**: Independent study will form a large part of these modules and will consist of literature searching, critical evaluation of the literature, writing the research proposal, experimental work and data collection. This spans all three years of the programme, with a phased activity. Year 1 will be the period during which a student identifies a research area and selects a potential research project (with suitable guidance). During this year they will research the relevant literature and formulate a pertinent research question, culminating in a hypotheses and aims and objectives. The literature review will be assessed at the end of the first year.

During Year 2 the students undertake a module which is aimed at introducing the students to research methods in dentistry, as well as an introduction to basic statistical methods. This will help them develop a research protocol, which forms part of the assessment in this module, which occurs at the end of the first semester of the second year. Data collection will start during Year 2.

Year 3 will include completion of data collection, data analysis and the write up of the project, which will be assessed at the end of Year 3. This unit aims to develop the student's general ability in the creation and interpretation of new knowledge, through original research by demonstrating a detailed analytical understanding of the investigations undertaken and the interpretation of data. This should lead to the construction and exposition of knowledge that has been acquired, and that will extend knowledge at the forefront of the discipline and be of a quality that will satisfy peer review and merit publication.

Provision for the acquisition of information literacy skills has been planned with the Faculty Librarian f. This will involve two separate sessions of approximately two hours' duration each and when applicable will be repeated annually. One session will cover 'advanced information retrieval systems' and a second session will address 'reference management systems'. The delivery of these 'information literacy skill' sessions will be carefully timetabled and integrated within the curriculum, at a time to suit the student's needs. An introduction to library resources will be done through an on-line induction programme delivered via MOLE.

Supervisors will provide appropriate training and monitoring in the early stages. Tutorial meetings will be arranged with project supervisors to discuss progress and give guidance. Where appropriate other experts, such as statisticians will be consulted during the protocol development, to enhance data collection, data entry and analysis. *Ad hoc* tutorials may be arranged with these experts to develop the students' understanding. Writing up the research as a final project report and as an article for submission to a scientific journal will be mentored by the project supervisor. (K6, K12, S6-S8, S10).

8. **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 paediatric dentistry 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 facilities of the Dental School, Dental Hospital and University (K1, K3, K6, S9-S10).

9. **Clinical Logbooks**: Each student must present a logbook of patients treated during the programme. As well as clinical details and treatment outcomes these case reports must include examples of self-reflective and evidence-based practice (K1, S5, S17).

10. **Audit/clinical governance**: The students will be expected to attend and contribute to the departmental journal clubs. They will also be required to attend departmental audit meetings and annual updates on dealing with medical emergencies, clinical governance and waste management provided by the STH NHS Trust. They will undertake an audit project (K7, S4).

11. **Supervised clinical activity**: Supervised clinical activity will be undertaken on consultant-supervised clinics. These will take place on a regular basis throughout the year. Students will undertake the comprehensive clinical management of paediatric patients. Students will be provided with an appropriate number of patients, with a wide range of conditions. This will provide the student with an appropriate exposure to a wide case mix and range of clinical experiences.

Teaching will be provided on a one-to-one basis with a clinical supervisor for each session and informal feedback will be provided on the clinic. Students will undertake aspects of clinical care with decreasing levels of supervision as the student attains competency.

Professional communication: Students will learn how to communicate at an appropriate level with colleagues, patients and other professionals. They will learn how to write reports, referral letters and undertake associated patient administration duties (K1-5, K11, K12, S1-3, S8, S11, S12, S13, S14, S15, S16, S17).

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

Formative assessments: The monitoring of progress of students is by a process of continuous assessment, which includes the allocation of assignments. In the first two weeks of the course the students will undertake an intensive induction module. 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. Subject to satisfactory performance students will be allowed to begin patient treatment (K1, S1).

For their research projects, students will be required to present their work in the form of a written dissertation in July of the third year (K12, S13, S18-21).

Summative assessments will be undertaken at the end of each module and will include the following components:

- Written examination papers.
- Oral and written presentation of project work undertaken by the student.

• Clinical examinations will be based on oral and written presentation of cases treated by the student, and an ability to diagnose and treatment plan cases not seen previously by the student.

Dissertation.

The award of the degree will depend upon satisfactory performance in all the required modules.

19. Reference points

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

The Strategic Plan of the School of Clinical Dentistry

The Mission Statement of the University of Sheffield

General Dental Council's Lifelong Learning Statement

The Quality Assurance Agency for Higher Education in England and Wales Benchmark Statement with regard to provision of subject knowledge and transferable skills

The curriculum as published by The General Dental Council in its documents "Preparing for practice – Dental team learning outcomes for registration" and "Standards for Dental Professionals".

The Learning and Teaching Strategy of the University of Sheffield

The guidelines of Masters' level courses within the Faculties of Medicine and Science at the University of Sheffield

The Curriculum for Specialist Training in Paediatric Dentistry

20. Programme structure and regulations

The course runs from October to September and is undertaken full time in four academic years (a part time equivalent is available over 4 years). The candidate will need to complete the Final Examination for the Degree before completion. The course consists to two 15 week semesters (October to January, January to July) followed by a period from July to September per year for completion of clinical work and the dissertation.

Details of the programme are as follows:

DENT59 DCLINDENT PAEDIATRIC DENTISTRY

1.	A person may be admitted as a candidate who is registered on the appropriate part the Professional Register, or is a recognised graduate in Dentistry, and who has completed not less than two years work as a dentist in a clinical setting deemed acceptable by the Board.			art of
2.			nme of study shall be pursued for three years full-time (or a part-time which would normally be 4 years).	
3.		A candidate	shall take:	
(a)	Year 1	DEN602	Principles of Clinical Management (Semester 1)	15

		DEN607	1. Introduction to Digital Dentistry and Dental Manufacturing	15	
	-	DEN418	Research Project Literature Review	30	
	DEN424	Dental Public Health-Foundations, Theory, Application and Critique			
	-	CDH613	Principles of Clinical Paediatric Dentistry I	30	
		DEN625	Clinical Paediatric Dentistry Practice Programme I	75	
			Total credits Year 1	180	
(b)	Year 2	DEN601	Research Methods in Clinical Dentistry	15	
. ,	-	HAR6035	Introduction to Statistics and Critical Appraisal	15	
		CDH614	Principles of Clinical Paediatric Dentistry II	30	
	-	DEN629	Paediatric Dentistry Case Studies	30	
		DEN410	Clinical Paediatric Dentistry Practice Programme II	90	
			Total credits Year 2	180	
(c)	Year 3	DEN411	Clinical Paediatric Dentistry Practice Programme III	90	
		DEN415	Paediatric Dentistry Thesis	90	
			Total credits Year 3	180	
			TOTAL CREDITS	540	
4.			e may proceed to the Thesis only on satisfactory completion of the un 3 (b) above		
5.		A candidate who has been awarded <i>three hundred and sixty credits</i> in respect of the units listed at 3(a) and (b) above shall be eligible for the award of the Master of Clinical Dentistry in Paediatric Dentistry.			
6.		A candidate who has been awarded <i>one hundred and eighty</i> credits in respect of the units listed at 3(a) and (b) above shall be eligible for the award of the MMedSci in Paediatric Dentistry.			
		A candidate who has been awarded <i>one hundred and twenty</i> credits in respect of the units listed at 3(a) and (b) above shall be eligible for the award of the PG Diploma in Paediatric Dentistry.			
7.		A candidate who has been awarded <i>sixty</i> credits in respect of the units listed at 3(a) and (b) above shall be eligible for the award of the PG Certificate in Paediatric Dentistry.			

21. Student development over the course of study

The course begins with registration and the Introductory week at the start of the first academic semester. Following this in the first two weeks of the course the students will undertake an introductory course and an intensive operative technique course. Subject to satisfactory performance students will be allowed to begin patient treatment. Satisfactory clinical performance during the second half of the Semester will allow the student to continue the course. Failure at this stage of the course will prevent the student from undertaking clinical work and may result in the student being advised to leave the course.

The award of the degree will depend upon satisfactory performance in all four areas of Research Methodology and the Research Literature Review: Principles of Paediatric Dentistry and Case Studies, Paediatric Dentistry Clinical Practice and the Research Dissertation. For their research projects, students will have regular meetings with their supervisors and will be expected to give at least one presentation of their protocol and findings before submitting their dissertation in the July of the third year.

22. Criteria for admission to the programme

Detailed information regarding admission to programmes is available from the University's On-Line Prospectus at <u>http://www.shef.ac.uk/courses/</u>.

The Master of Clinical Dentistry (Paediatric Dentistry) course is aimed at dental surgeons holding a primary dental degree with at least two years' experience in hospital or general dental practice.

23. Additional information

The Dental School building was opened in 1992 and houses a modern 120-seat lecture theatre with new up-todate audio-visual equipment. Further audio-visual equipment is available to staff via the University Audio Visual Services. On the ground floor there are Seminar/Tutorial rooms, an IT Suite with 20 workstations and an internet café/common room. Most departments have study rooms for use by postgraduate students and all have access to computer facilities within the hospital or School. There is a further small room for occasional tutorial use on the second floor and one in an adjacent building. On the second floor there is a 40-unit Clinical Skills Laboratory with a dental chair for demonstrations via a live video link and computers offering computer aided learning packages. A new wing to the Dental School was opened in April 2008 and houses the most upto-date research laboratories, which are used with appropriate supervision by both undergraduate and postgraduate students during their research projects.

The largest learning resource for the students is the patients who attend the Charles Clifford Dental Hospital, which has modern and well-presented clinical facilities and equipment. The various clinical departments are equipped with a total of 142 dental units in open clinics or small side clinics. Facilities for treatment under inhalation anaesthesia as well as conscious sedation and recovery are available. A very well-equipped Radiography Department (with a Scanora, skull units, caphalostats, orthopantomagraphs, intra-oral X-ray units and a dedicated teaching room) and Oral Pathology laboratories provide support services for all clinical areas. A hospital dental production laboratory supports both undergraduate and postgraduate teaching and learning as well as National Health Service treatment. All of these facilities are used by undergraduate and postgraduate dental students. All students are provided with clinical attire. Changing rooms, canteen and common room facilities are available in the basement of the Dental Hospital building.

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 http://www.shef.ac.uk/ssid.