QUALIFICATION HANDBOOK

Level 7 Certificate in Dental Nursing (SCQF) (7393-10)

July 2011 Version 1.0

City & Guilds

Qualification at a glance

Subject area	Dental Nursing
City & Guilds number	7393-10
Age group approved	16+
Entry requirements	None
Assessment	Dated examinations
Automatic Approval	Available
Support materials	Centre handbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	**City & Guilds number**
Level 7 Certificate in Dental Nursing (SCQF)	7393-10

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1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	It is for candidates who wish to develop the knowledge required for full-time employment and/or career progression in the dental sector.
What does the qualification cover?	It allows candidates to learn, develop and practise the skills required for employment and/or career progression in the dental sector.
Is the qualification part of a framework or initiative?	It serves as a technical certificate in the dentistry apprenticeship framework in Scotland.

Structure

To achieve the **Level 7 Certificate in Dental Nursing**, learners must achieve **32 credits** from the mandatory units.

City & Guilds unit number	Unit title	Credit value
Mandatory		
002	Principles of infection control in the dental environment	8
003	Assessment of oral health and treatment planning	8
004	Dental radiography	8
005	Scientific principles in the management of plaque related diseases	8

2 Centre requirements

Approval

If your centre is approved to offer the qualification Level 3 in Dental Nursing (7393-01) you will be given automatic approval for this qualification.

Centres that offer 3232 can apply for approval to offer the Level 7 Certificate in Dental Nursing (SCQF) (7393-10) using the **fast track approval form**, available from the City & Guilds website.

Centres should use the fast track form if:

- there have been no changes to the way the qualifications are delivered, and
- they meet all of the approval criteria in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After 12 months, the Centre will have to go through the standard Qualification Approval Process. The centre is responsible for checking that fast track approval is still current at the time of application.

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information. Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Centre staffing

Staff delivering this qualification must be able to demonstrate that they meet the following occupational expertise requirements.

To meet the quality assurance criteria for this qualification, the centre must ensure that the following internal roles are undertaken:

- quality assurance co-ordinator
- trainer / tutor
- examinations secretary
- invigilator.

Trainer/tutors must

- be occupationally knowledgeable in the areas of Dental Nursing for which they are delivering training. This knowledge must be at least to the same level as the training being delivered
- have credible experience of providing training.

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

Learners should not be entered for a qualification of the same type, content and level as that of a qualification they already hold.

There are no formal entry requirements for learners undertaking this qualification. However, centres must ensure that learners have the potential and opportunity to successfully gain the qualification. This will presuppose the necessary literacy, numeracy and communication skills required to complete the qualification.

Age restrictions

There are no age limits attached to learners undertaking the qualification unless this is a legal requirement of the process or the environment.

3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualification
- any units they have already completed, or credit they have accumulated which is relevant to the qualification
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

4 Assessment

Assessment of the qualification

Level 7 Certificate in Dental Nursing (SCQF)

Unit number	Unit title	Assessment method	Where to obtain assessment materials
002	Principles of infection control in the dental environment	Short answer question paper	Available by applying via the walled garden
003	Assessment of oral health and treatment planning		
004	Dental radiography		
005	Scientific principles in the management of plaque related diseases		

For this qualification, learners will be required to complete one synoptic test consisting of multiple choice, one word answers and scenario questions covering units 002-005.

Grading and marking

Grading of the examination for this qualification is pass or fail.

Test specifications

Test 1: unit 002- 005
Duration: 1 ½ hours

Unit	Unit title	%
002	Principles of infection control in the dental environment	25
003	Assessment of oral health and treatment planning	25
004	Dental radiography	25
005	Scientific principles in the management of plaque related diseases	25
	Total	**100**

5 Units

Availability of units

Structure of units

These units each have the following:

- City & Guilds reference number
- title
- level
- credit value
- unit aim
- learning outcomes which are comprised of a number of assessment criteria
- Suggested topics for learning programmes

Unit 002 Principles of infection control in the dental environment

Level:	SCQF 7
Credit value:	8
GLH:	40
Relationship to NOS:	This unit contributes towards the knowledge and understanding required for the following qualifications: • NVQ Level 3 dental nurse qualification • ENTO A Ensure your own actions reduce the risk to health & safety.
Aim:	The aim of this unit is to describe infectious diseases, their routes of transmission and methods of preventing cross infection.

Learning outcome	The learner will:
1. Describe the process of infection control	
Assessment criteria	
The learner can: 1.1 describe the causes of cross infection 1.2 describe the methods for preventing cross infection 1.3 explain the principles of Standard (Universal) infection control precautions.	

Suggested topics for learning programmes
• transmission of infection • measures for preventing cross infection • management of blood and body fluid spillages • social, clinical and aseptic hand hygiene procedures • barrier techniques including zoning • importance of record keeping in relation to cross infection

Learning outcome	The learner will:
2. Explain the significance of micro-organisms in the dental environment	
Assessment criteria	
The learner can: 2.1 describe the main micro-organisms in potentially infectious conditions 2.2 explain the routes of transmission of micro-organisms	

2.3 explain the significance of the terms pathogens and non-pathogens.

Suggested topics for learning programmes
• groups of micro organisms present in the oral cavity eg, bacteria, viruses, fungi, and spores • organisms capable of producing disease • routes of entry • direct/indirect contact

Learning outcome	The learner will:
3. Describe the management of infectious conditions affecting individuals in the dental environment	
Assessment criteria	
The learner can: 3.1 describe infectious conditions which affect individuals within the dental environment 3.2 describe what actions to take to prevent the spread of infectious diseases in the dental environment 3.3 explain the importance of immunisation of dental personnel.	

Suggested topics for learning programmes
• infections important in dentistry eg: Hepatitis B, HIV, Herpes Simplex • importance of immunisation • staff induction policy • relevance of patients and staff medical and social history

Learning outcome	The learner will:
4. Describe methods for decontamination	
Assessment criteria	
The learner can: 4.1 describe the principles and methods of clinical and industrial sterilisation 4.2 describe the principles and methods of disinfection 4.3 explain the preparation of a clinical area to control cross infection 4.4 explain the procedures used to decontaminate a clinical environment after use.	

Suggested topics for learning programmes
• clinical equipment used for sterilisation eg washers, ultrasonic cleaners, vacuum sterilisers, gamma radiation, including measures for checking sterility • difference between asepsis, sterilisation and disinfection • correct method of sterilisation and decontamination appropriate to setting • preparation and cleaning the clinical environment

- different types of disinfectant and their uses
- different methods used in maintaining the cleanliness of equipment, handpieces and instruments
- importance of be able to identify single use and disposable instruments/equipment

Learning outcome	The learner will:
5. Describe relevant health and safety legislation	
Assessment criteria	
The learner can: 5.1 identify health and safety policies and guidelines in relation to infection control 5.2 describe how to deal with a sharps injury 5.3 explain the use of personal protective equipment in the dental environment 5.4 describe ways of dealing with clinical and non-clinical waste.	

Suggested topics for learning programmes

- Health & Safety at work Act
- Control of Substances Hazardous to Health regulations (COSHH)
- Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
- Special Waste and Hazardous Waste Regulations
- protocols for sharps disposal
- clean and contaminated sharps injuries
- importance of the correct work wear
- Department of Health guidelines
- Health & Safety Executive guidelines

Unit 003 Assessment of oral health and treatment planning

Level:	SCQF 7
Credit value:	8
GLH:	40
Relationship to NOS:	This unit contributes towards the knowledge and understanding required for the following qualifications: • NVQ Level 3 dental nurse qualification • CH36 Basic Life Support
Aim:	The aim of this unit is to understand the reasons and effective methods that can be used in oral health treatment planning.

Learning outcome	The learner will:
1. Describe methods of dental assessment	
Assessment criteria	
The learner can: 1.1 identify the different types of dental records and charts 1.2 describe methods of recording soft tissue conditions 1.3 explain methods of recording periodontal conditions using periodontal charts.	

Suggested topics for learning programmes
• different charting systems eg: Zsigmondy-Palmer and International Dental Federation • accepted tooth notations • different methods of clinical assessment eg: types of probes, dyes, transillumination, vitality testing • full periodontal charting and definitions including BPE • data protection • guidelines and legislation relating to patient's records and confidentiality

Learning outcome	The learner will:
2. Describe the clinical assessments associated with orthodontics	
Assessment criteria	
The learner can: 2.1 describe the classifications of malocclusion 2.2 describe the types of orthodontic appliances in relation to treatment required 2.3 explain pre and post operative instructions for orthodontic procedures.	

Suggested topics for learning programmes
• function and uses of removable appliances eg: retainers/functional • function and uses of fixed appliances • care and maintenance of both removable and fixed appliances • classification of malocclusion • images/models/records

Learning outcome	The learner will:
3. Explain the changes which may occur in oral tissues	
Assessment criteria	
The learner can: 3.1 explain diseases of the oral mucosa 3.2 describe the effects of ageing on the soft tissue 3.3 outline the medical conditions that may affect the oral tissues.	

Suggested topics for learning programmes
• the process of investigation of hard and soft tissue lesions • management of different forms of facial pain • importance of maintaining a healthy periodontium • factors that can aggravate the periodontal condition eg: drugs, hormonal, smoking, medical • consequences to changes in salivary function

Learning outcome	The learner will:
4. Recognise medical emergencies that can occur in the dental environment	
Assessment criteria	
The learner can: 4.1 identify medical emergencies that may occur in the dental environment and how to deal with them 4.2 describe the principles of First Aid.	

Suggested topics for learning programmes
• medical emergency drugs and equipment • contents of First Aid box • importance of recording events in an accident book • medical emergencies eg. fainting, diabetic coma, asthma attack, angina/myocardial infarction, epileptic seizure, respiratory arrest, cardiac arrest. • First Aid Act

Learning outcome	The learner will:
5. Outline the basic structure and function of oral and dental anatomy	
Assessment criteria	
The learner can: 5.1 describe the structure, morphology and eruption dates of the primary and secondary dentition 5.2 describe the structure and function of teeth, gingivae and supporting tissue 5.3 describe the structure of the maxilla and mandible 5.4 describe the position and function of salivary glands and muscles of mastication.	

Suggested topics for learning programmes
• basic structure of the maxilla and mandible including the nerve and blood supply to the teeth and supporting structures • difference between deciduous and permanent dentition • the detailed structure of a tooth and the functions of each tissue • importance of the salivary glands and their function in aiding speech, mastication, and digestion • movement of the jaw by the muscles of mastication

Unit 004 Dental radiography

Level:	SCQF 7
Credit value:	8
GLH:	35
Relationship to NOS:	This unit contributes towards the knowledge and understanding required for the following qualifications: • NVQ Level 3 dental nurse qualification • ENTO A Ensure your own actions reduce the risk to health & safety
Aim:	The aim of this unit is to understand current radiography legislation including the principles and techniques of taking and processing radiographs.

Learning outcome	The learner will:
1. Explain the regulations and hazards associated with ionising radiation	
Assessment criteria	
The learner can: 1.1 outline the principles of the IRMER regulations 1.2 explain the safe use of x-ray equipment 1.3 explain the role of dental personnel when using ionising radiation in the dental environment 1.4 identify the hazards associated with ionising radiation.	

Suggested topics for learning programmes
• ionising radiation regulations 1999 • ionising radiation (medical exposure) regulations 2000 • reasons for dental radiographs • guidelines for safe use of dental radiography in the dental environment • understand the ALARA (as low as reasonably achievable) concept • hazards affecting general health

Learning outcome	The learner will:
2. Distinguish between the different radiographic films and describe their uses	
Assessment criteria	
The learner can: 2.1 identify different intra oral radiographs and explain their uses 2.2 identify different extra oral radiographs and explain their uses 2.3 outline the reasons for using digital radiography.	

Suggested topics for learning programmes
• understand the function and purpose of bitewing, periapical, occlusal radiographs • understand the function and purpose of lateral oblique, cephalostats, orthopantomographs radiographs • aids and adaptations that can be used were appropriate • techniques and equipment used in digital radiography • function of intensifying screens

Learning outcome	The learner will:
3. Describe the imaging process and the chemicals used	
Assessment criteria	
The learner can: 3.1 explain the manual and automatic processing of radiographs 3.2 describe the faults that may occur during the taking and processing of radiographs 3.3 explain the chemicals used in radiography 3.4 explain safe handling and storage of chemicals.	

Suggested topics for learning programmes
• layout of a darkroom • maintenance of developing and fixing solutions • reasons and corrections of faults

Learning outcome	The learner will:
4. Explain the need for an effective quality control system	
Assessment criteria	
The learner can: 4.1 explain the importance of rotating film stock 4.2 explain the methods of mounting radiographs correctly 4.3 describe the storage of radiographs 4.4 describe suitable quality control recording systems.	

Suggested topics for learning programmes
• implementation of an effective quality control system eg step wedge, coin test • different methods of mounting and storing radiographs

Unit 005 Scientific principles in the management of plaque related diseases

Level:	SCQF 7
Credit value:	8
GLH:	40
Relationship to NOS:	This unit contributes towards the knowledge and understanding required for the following qualifications: • NVQ Level 3 dental nurse qualification • ENTO A Ensure your own actions reduce the risk to health & safety
Aim:	The aim of this unit is to understand the aetiology and progression of oral diseases, methods of prevention, and restoration of the dentition.

Learning outcome	The learner will:
1. Describe common oral diseases	
Assessment criteria	
The learner can: 1.1 describe the aetiology and progression of dental caries 1.2 describe the aetiology and progression of periodontal disease 1.3 outline the development of plaque 1.4 describe the inflammatory process and effects of the disease process.	

Suggested topics for learning programmes
• micro-organisms involved in the caries and periodontal process • the process of demineralisation and remineralisation • importance of plaque in the oral disease process • signs and symptoms of inflammation • contributing factors

Learning outcome	The learner will:
2. Outline methods for the prevention and management of oral diseases	
Assessment criteria	
The learner can: 2.1 identify effective oral hygiene techniques to prevent oral diseases 2.2 describe how diet can affect oral health	

2.3 explain the advantages and disadvantages of the different applications of fluoride.

Suggested topics for learning programmes
• methods/aids that can be used to maintain good oral hygiene • role of sugar and snacks between meals in the caries process • role of topical and systemic fluoride in preventing oral disease • dental health messages • erosion/abrasion/attrition • role of diet and drinks in oral disease • clinical intervention eg scale and polish

Learning outcome	The learner will:
3. Describe how to manage and handle materials and medicaments during restorative procedures in plaque related diseases	
Assessment criteria	
The learner can: 3.1 identify the equipment, instruments and materials used during and finishing restorations 3.2 describe the different matrix systems used during restorative procedures 3.3 identify the hazards associated with restorative materials and equipment.	

Suggested topics for learning programmes
• different matrix retainers and bands eg steel, cellulose • different finishes instruments eg mandrels, discs, burs • storage of amalgam and disposal of waste amalgam • contents of a mercury spillage kit and how to use it • hazards eg etch, light cure, amalgam • materials eg linings, dressings, permanent filling, materials

Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Qualifications and Credit Framework (QCF)**: general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events**: dates and information on the latest Centre events
- **Online assessment**: information on how to register for GOLA/e-volve assessments.

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: **learnersupport@cityandguilds.com**
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: **intcg@cityandguilds.com**
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **centresupport@cityandguilds.com**
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: **singlesubjects@cityandguilds.com**
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **intops@cityandguilds.com**
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, GOLA/e-volve, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: **walledgarden@cityandguilds.com**
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