Level 3 Award in Dental Nursing (7393-01)

Qualification handbook
500/2907/1

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Qualification handbook

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1 About this document

This document contains the information that centres need to offer the following qualification:

Level 3 Award in Dental Nursing (7393-01)

QCA accreditation number	**500/2907/1**

This document includes details and guidance on:
- centre resource requirements
- learner entry requirements
- information about links with, and progression to, other qualifications
- qualification units and specifications
- assessment requirements.

2   About the Award in Dental Nursing

2.1   Aim of the qualification

The aims of this qualification are to:

- support the needs of the individuals who work or aim to work as Dental Nurses in the dental sector
- allow individuals to learn, develop and practice the skills required for employment and/or career progression in the dental sector
- act as a Technical Award as part of the Apprenticeship framework in England and Wales
- contribute to satisfying the registration requirements of the industry regulator and professional body for Dental Nurses in England, Scotland and Wales
- provide valuable accreditation of skills and/or knowledge for individuals not following N/SVQ and Apprenticeship programmes
- contribute to the knowledge and understanding towards the related Level 3 NVQ in Dental Nursing, whilst containing additional skills and knowledge which go beyond the scope of the National Occupational Standards but are essential for those working in the industry in the 21st century
- contribute to skills and/or knowledge requirements within the Knowledge Skills Framework (KSF)
- support Government initiatives towards the National Qualifications Framework (NQF)
- act as a stand alone qualification, accredited as part of the NQF at Level 3.

It allows learners to develop the knowledge required for full-time employment and/or career progression in the Dental Sector. It also provides valuable accreditation of knowledge and understanding towards the related level 3 NVQ in Dental Nursing.

Accreditation details

This qualification is

- accredited by the Qualifications and Curriculum Authority at Level 3 of the NQF

For further details about accreditation, national qualification frameworks and level descriptors please refer to Appendix 1.

2   About the Award in Dental Nursing

2.2 The structure of the qualification

This section provides information about the structure of the qualification and unit combinations required for the qualification.

Full qualifications

The qualification will be awarded to learners on successful completion of the required units as shown in the table below:

QCA unit reference	City & Guilds unit number	Unit title
Y/500/9824	Unit 001	Principles of infection control in the dental environment
D/500/9825	Unit 002	Assessment of oral health and treatment planning
H/500/9826	Unit 003	Dental radiography
K/500/9827	Unit 004	Scientific principles in the management of plaque related diseases

2   About the Award in Dental Nursing

2.3   Sources of information and assistance

Related publications

City & Guilds also provides the following documents specifically for this qualification:

Publication	Available from
Community & Society Guidance updates	www.cityandguilds.com
Promotional materials	www.cityandguilds.com
Fast track approval forms/generic fast track approval form	www.cityandguilds.com

Other essential City & Guilds documents

There are other City & Guilds documents which contain general information on City & Guilds qualifications:

- ***Providing City & Guilds qualifications – a guide to centre and qualification approval***
  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.

- ***Ensuring quality***
  contains updates on City & Guilds assessment and policy issues.

- ***Centre toolkit***
  contains additional information on *Providing City & Guilds qualifications*, in a CD-ROM, which links to the internet for access to the latest documents, reference materials and templates. The *Centre Toolkit* is sent to centres when they receive approved centre status. It is also available to order at an additional cost.

- ***Online catalogue***
  contains details of general regulations, registration and certification procedures and fees. This information is also available online.

- Guidance Update to Community & Society centres contains updates on centre management, records, assessment and verification.

For the latest updates on our publications and details of how to obtain them and other City & Guilds resources, please refer to the City & Guilds website.

City & Guilds websites

Website	Address	Purpose and content
City & Guilds main website	**www.cityandguilds.com**	This is the main website for finding out about the City & Guilds group, accessing qualification information and publications.
SmartScreen	**www.smartscreen.co.uk**	SmartScreen is the City & Guilds online learning support website. It gives registered subscribers access to qualification-specific support materials.
Walled Garden	**www.walled-garden.com**	The Walled Garden is a qualification administration portal for approved centres, enabling them to register learners and claim certification online.

Contacting City & Guilds by e-mail

The following e-mail addresses give direct access to our Customer Relations team.

e-mail	Query types
learnersupport@cityandguilds.com	all learner enquiries, including • requesting a replacement award • information about our qualification • finding a centre.
centresupport@cityandguilds.com	all centre enquiries
walledgarden@cityandguilds.com	all enquiries relating to the Walled Garden, including • setting up an account • resetting passwords.

3   Learner entry and progression

Learner 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.

Progression

This qualification provides underpinning knowledge related to the NVQ Level 3 in Dental Nursing.

4   Centre requirements

4.1   Centre, qualification and fast track approval

Centres not yet approved by City & Guilds

To offer this qualification, new centres will need to gain both **centre and qualification approval**. Please refer to Appendix 3 for further information.

Existing City & Guilds centres

To offer this qualification, centres already approved to deliver City & Guilds qualifications will need to gain **qualification approval**. Please refer to Appendix 3 for further information.

Centres already offering City & Guilds qualifications in this subject area

Centres approved to offer the qualification Level 3 NVQ in Dental Nursing (3231-23/83) may apply for approval for the new Level 3 Award in Dental Nursing (7393-01/91) using the **fast track approval form**, available from the City & Guilds website.

Centres may apply to offer the new qualification using the fast track form
- providing there have been no changes to the way the qualifications are delivered, and
- if they meet all of the approval criteria specified in the fast track form guidance notes.

Fast track approval is available for 12 months from the launch of the qualification. After this time, the qualification is subject to the standard Qualification Approval Process. It is the centre's responsibility to check that fast track approval is still current at the time of application.

4   Centre requirements

4.2   Resource requirements

Human resources

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.

Staff delivering the qualifications

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

Trainer / tutors must

- be occupationally knowledgeable in the area(s) 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.

Continuing professional development (CPD)

Centres are expected to support their staff in ensuring that their knowledge of the occupational area and of best practice in delivery, mentoring, training and assessment remains current, and takes account of any national or legislative developments.

4   Centre requirements
4.3   Registration and certification

Administration

Full details of City & Guilds' administrative procedures for this qualification are provided in the Online Catalogue. This information includes details on:

- registration procedures
- enrolment numbers
- fees
- entry for examinations
- claiming certification.

Centres should be aware of time constraints regarding the registration and certification periods for the qualification, as specified in the City & Guilds Online Catalogue.

Centres should follow all administrative guidance carefully, particularly noting that fees, registration and certification end dates for the qualification are subject to change. The latest News is available on the website (**www.cityandguilds.com**).

Regulations for the conduct of examinations

Regulations for the conduct of examinations for online and written examinations are given in *Providing City & Guilds qualifications - a guide to centre and qualification approval* and in the *Online Catalogue*. Centres should ensure they are familiar with all requirements prior to offering assessments.

Retaining assessment records

Centres must retain copies of learner assessment records for at least three years after certification.

Notification of results

After completion of assessment, learners will receive, via their centre, a 'notification of learner results', giving details of how they performed. It is not a award of achievement.

Full certificates

Full awards are only issued to learners who have met the full requirements of the qualification, as described in section 2.2   The structure of the qualification

5 Course Design and Delivery

5.1 Recommended delivery strategies

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Centres may design course programmes of study in any way that
* best meets the needs and capabilities of their learners
* which satisfies the requirements of the qualification.

In particular, staff should consider the skills and knowledge related to the national occupational standards in Dental Nursing.

City & Guilds recommends that centres address the wider curriculum, where appropriate, when designing and delivering the course. Centres should also consider links to the National Occupational Standards, Key Skills and other related qualifications. Relationship tables are provided in section 6 Relationships to other qualifications to assist centres with the design and delivery of the qualification.

Centres may wish to include topics as part of the course programme which will not be assessed through the qualification.

For further information to assist with the planning and development of the programme, please refer to the following:
* Suggested topics for learning programmes
within each unit.

5   Course Design and Delivery

5.2   Data protection, confidentiality and legal requirements

Data protection and confidentiality

Data protection and confidentiality must not be overlooked when planning the delivery of this qualification.

Centres offering this qualification may need to provide City & Guilds with personal data for staff and learners. Guidance on data protection and the obligations of City & Guilds and centres are explained in *Providing City & Guilds qualifications*.

6 Relationships to other qualifications

6.1 Links to National Occupational Standards and NVQ

City & Guilds has identified the connections to the NVQ in Dental Nursing and the National Occupational Standards in Dental Nursing. This mapping is provided as guidance and suggests areas of overlap and commonality between the qualifications. It does not imply that learners completing units in one qualification are automatically covering all of the content of the qualifications listed in the mapping.

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that learners meet requirements of all units/qualifications. For example, a qualification may provide knowledge towards an NVQ, but centres are responsible for ensuring that the learner has met all of the knowledge requirements specified in the NVQ standards.

Relationship between the Vocational Qualification and Level 3 NVQ in Dental Nursing

This qualification	NVQ Level 3 in Dental Nursing
Unit Number/Title	Related units
001 Principles of infection control in the dental environment	001Ensure your own actions reduce the risk to health and safety (ENTO A)
002 Assessment of oral health and treatment planning	003 Provide basic life support (CHS36)
003 Dental radiography	001Ensure your own actions reduce the risk to health and safety (ENTO A)
004 Scientific principles in the management of plaque related diseases	001Ensure your own actions reduce the risk to health and safety (ENTO A)

6   Relationships to other qualifications
6.2   Key skills (England, Wales and Northern Ireland)

This qualification includes opportunities to develop and practise many of the underlying skills and techniques described in Part A of the standard for each key skills qualification. Where learners are working towards any key skills alongside this qualification they will need to be registered with City & Guilds for the key skills qualifications.

It should not be assumed that learners will necessarily be competent in, or able to produce evidence for, the key skills at the same level as this qualification.

The 'signposts' below identify the **potential** for key skills portfolio evidence gathering that can be naturally incorporated into the completion of each unit. Any key skills evidence needs to be separately assessed and must meet the relevant standard defined in the QCA document '*Key skills qualifications standards and guidance*'.

Unit number and title	Communication	Application of Number	Information Technology
001 Principles of infection control in the dental environment			
002 Assessment of oral health and treatment planning	2.1, 2.2, 2.3, 1. 1, 1.2	1.1, 1.2, 1.3	
003 Dental radiography		1.1, 1.2, 1.3	
004 Scientific principles in the management of plaque related diseases	2.1, 2.2	2.3, 2.2	

Unit number and title	Problem Solving	Improving own learning and performance	Working With Others
001 Principles of infection control in the dental environment			
002 Assessment of oral health and treatment planning			
003 Dental radiography	2.1, 2.2		
004 Scientific principles in the management of plaque related diseases			

6   Relationships to other qualifications

6.3   The wider curriculum

Learners taking this qualification may also have the opportunity to cover the following aspects of the wider curriculum.

Unit No and Title	Spiritual, moral, ethical, social and cultural issues	European dimension	Environmental education	Health and safety
001 Principles of infection control in the dental environment	✓	✓	✓	✓
002 Assessment of oral health and treatment planning	✓	✓		✓
003 Dental radiography	✓	✓	✓	✓
004 Scientific principles in the management of plaque related diseases	✓		✓	✓

7 Assessment

7.1 Summary of assessment requirements

For this qualification, learners will be required to complete the following assessments:
one synoptic test consisting of multiple choice, one word answers and scenario questions covering units 1-4.

Grading and marking

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

Sample assessments

City & Guilds provides test sample questions, which are included in Appendix 2 of this handbook.

7   Assessment

7.2 Test specification

The test specification for this qualification is below:

Test   Units 001, 002, 003, 004
Duration: $1^1/_2$ hours

Unit number	Unit title	approximate percentage %
001	Principles of infection control in the dental environment	25
002	Assessment of oral health and treatment planning	25
003	Dental Radiography	25
004	Scientific principles in the management of plaque related diseases	25

8   Units

8.1   About the units

Availability of units

The units for this qualification follow. They may also be obtained from the centre resources section of the City & Guilds website.

Structure of units

The units in this qualification are written in a standard format and comprise the following:

- unit reference and title
- rationale
- list of learning outcomes
- guided learning hours
- connections with other qualifications, eg NVQs, key skills
- assessment details
- learning outcomes in detail expressed as underpinning knowledge

Unit 001 Principles of infection control in the dental environment

Rationale

The aim of this unit is to describe infectious diseases, their routes of transmission and methods of preventing cross infection.

Learning outcomes

There are **five** outcomes to this unit. The learner will be able to:

- describe the process of infection control
- explain the significance of micro-organisms
- describe the management of infectious conditions affecting dental patients
- describe the various methods of decontamination
- describe relevant health & safety legislation.

Guided learning hours

It is recommended that 15 hours should be allocated for this unit. This may be on a full time or part time basis.

Connections with other qualifications

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

Key Skills

This unit does not contribute towards any Key Skills.

Assessment and grading

The outcomes for this unit will be assessed in a 1½ hour assessment paper containing multi-choice, one word answers, and scenario questions.

Unit 001 Principles of infection control in the dental environment

Outcome 1   Describe the process of infection control

Underpinning knowledge

The learner will be able to:

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

Unit 001   Principles of infection control in the dental environment

Outcome 2   Explain the significance of micro-organisms in the dental environment

Underpinning knowledge

The learner will be able to:

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

Unit 001   Principles of infection control in the dental environment

Outcome 3   Describe the management of infectious conditions affecting individuals in the dental environment

Underpinning knowledge

The learner will be able to:

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

Unit 001 Principles of infection control in the dental environment

Outcome 4 Describe methods for decontamination

Underpinning knowledge

The learner will be able to:

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

Unit 001 Principles of infection control in the dental environment

Outcome 5 Describe relevant health and safety legislation

Underpinning knowledge

The learner will be able to:

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 002   Assessment of oral health and treatment planning

Rationale

The aim of this unit is to understand the reasons and effective methods that can be used in oral health treatment planning.

Learning outcomes

There are **five** outcomes to this unit. The learner will be able to:

* describe the various methods of dental assessment
* define the clinical assessments associated with orthodontics
* explain the changes that may occur in the oral tissues
* recognise medical emergencies that may occur in the dental environment
* outline the basic structure and function of oral and dental anatomy.

Guided learning hours

It is recommended that 25 hours should be allocated for this unit. This may be on a full time or part time basis.

Connections with other qualifications

This unit contributes towards the knowledge and understanding required for the following qualifications:

* NVQ Level 3 dental nurse qualification
* CH36 Basic Life Support

Key Skills

This unit contributes towards the Key Skills in the following areas:

* Communication
* Application of Number

Assessment and grading

The outcomes for this unit will be assessed in a 1½ hour assessment paper containing multi-choice, one word answers, and scenario questions.

Unit 002 Assessment of oral health and treatment planning

Outcome 1 Describe methods of dental assessment

Underpinning knowledge

The learner will be able to:

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

Unit 002 Assessment of oral health and treatment planning

Outcome 2 Describe the clinical assessments associated with orthodontics

Underpinning knowledge

The learner will be able to:

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

Unit 002　Assessment of oral health and treatment planning

Outcome 3　　Explain the changes which may occur in oral tissues

Underpinning knowledge

The learner will be able to:

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

Unit 002   Assessment of oral health and treatment planning

Outcome 4   Recognise medical emergencies that can occur in the dental environment

Underpinning knowledge

The learner will be able to:

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

Unit 002 Assessment of oral health and treatment planning

Outcome 5 Outline the basic structure and function of oral and dental anatomy

Underpinning knowledge

The learner will be able to:

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 003   Dental radiography

Rationale

The aim of this unit is to understand current radiography legislation including the principles and techniques of taking and processing radiographs.

Learning outcomes

There are **four** outcomes to this unit. The learner will be able to:
- explain the regulations and hazards associated with ionising radiation
- distinguish between the different radiographic films and their uses
- describe the imaging process and the different chemicals used
- explain the need for stock control of radiographic films.

Guided learning hours

It is recommended that 10 hours should be allocated for this unit. This may be on a full time or part time basis.

Connections with other qualifications

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

Key Skills

This unit contributes towards the Key Skills in the following areas:
- Application of Number
- Problem Solving

Assessment and grading

The outcomes for this unit will be assessed in a 1½ hour assessment paper containing multi-choice, one word answers, and scenario questions.

Unit 003   Dental radiography

Outcome 1   Explain the regulations and hazards associated with ionising radiation

Underpinning knowledge

The learner will be able to:

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

Unit 003   Dental radiography

Outcome 2   Distinguish between the different radiographic films and describe their uses

Underpinning knowledge

The learner will be able to:

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

Unit 003   Dental radiography

Outcome 3   Describe the imaging process and the chemicals used

Underpinning knowledge

The learner will be able to:

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

Unit 003   Dental radiography

Outcome 4   Explain the need for an effective quality control system

Underpinning knowledge

The learner will be able to:

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 004 Scientific principles in the management of plaque related diseases

Rationale

The aim of this unit is to understand the aetiology and progression of oral diseases, methods of prevention, and restoration of the dentition.

Learning outcomes

There are **three** outcomes to this unit. The learner will be able to:

- describe common oral diseases
- outline methods for the prevention and management of oral diseases
- describe how to manage and handle materials/ during restorative procedures in plaque related diseases.

Guided learning hours

It is recommended that 20 hours should be allocated for this unit. This may be on a full time or part time basis.

Connections with other qualifications

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

Key Skills

This unit contributes towards the Key Skills in the following areas:

- Communication
- Application of Number

Assessment and grading

The outcomes for this unit will be assessed in a 1½ hour assessment paper containing multi-choice, one word answers, and scenario questions.

Unit 004   Scientific principles in the management of plaque related diseases

Outcome 1   Describe common oral diseases

Underpinning knowledge

The learner will be able to:

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

Unit 004   Scientific principles in the management of plaque related diseases

Outcome 2   Outline methods for the prevention and management of oral diseases

Underpinning knowledge

The learner will be able to:

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

Unit 004   Scientific principles in the management of plaque related diseases

Outcome 3   Describe how to manage and handle materials and medicaments during restorative procedures in plaque related diseases

Underpinning knowledge

The learner will be able to:

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 Accreditation, national frameworks and qualification level descriptors

Please visit the following websites to find information on accreditation, national frameworks and qualification level descriptors in each country.

Nation	Who to contact	Website
England	The Qualifications and Curriculum Authority	**www.qca.org.uk**
Scotland	The Scottish Qualifications Authority	**www.sqa.org.uk**
Wales	The Department for Education, Lifelong Learning and Skills Wales (**DELLS**)	**www.wales.gov.uk**
Northern Ireland	The Council for Curriculum, Examinations and Assessment	**www.ccea.org.uk**

Appendix 2　　Sample Questions

1. Which tooth has number 26 FDI notation?

a. Upper left permanent second premolar [ ]
b. Upper left permanent first molar [ ]
c. Upper right permanent second premolar [ ]
d. Upper right permanent first molar [ ]

(1 mark)

2. Complete the table below to show the difference between deciduous and permanent second molar teeth

	Deciduous	**Permanent**
Roots		
Shape		
Colour		

(6 marks)

3. Which of the following health hazard is associated with a low dose of dental radiation?

a. burn [ ]
b. leukaemia [ ]
c. oral carcinoma [ ]
d. damage to sensitive skin tissues [ ]

(1 mark)

4. List **three** functions of saliva (3 marks)

5. From the list below which four items make up the contents of a bitewing radiograph.

a. outer wrapper	e. intensifying screen
b. tungsten	f. black paper
c. lead foil	g. the film
d. blue paper	h. silver foil

a. a, c, f, g [ ]
b. a, c, d, g [ ]
c. a, e, f, g [ ]
d. a, c, e, g [ ]

(2 marks)

6. List **three** oral health messages you would give to a patient who was a regular smoker and state the relevance of each point

Message	Relevance

(6 marks)

Appendix 3   Obtaining centre and qualification approval

Only approved organisations can offer City & Guilds qualifications. Organisations approved by City & Guilds are referred to as **centres**.

Centres must meet a set of quality criteria including:
- provision of adequate physical and human resources
- clear management information systems
- effective assessment and quality assurance procedures including learner support and reliable recording systems.

An organisation that has not previously offered City & Guilds qualifications must apply for approval to become a centre. This is known as the **centre approval process** (**CAP**). Centres also need approval to offer a specific qualification. This is known as the **qualification approval process** (**QAP**), (previously known as scheme approval). In order to offer this qualification, organisations which are not already City & Guilds centres must apply for centre and qualification approval at the same time. Existing City & Guilds centres will only need to apply for qualification approval for the particular qualification.

Full details of the procedures and forms for applying for centre and qualification approval are given in *Providing City & Guilds qualifications - a guide to centre and qualification approval*, which is also available on the City & Guilds centre toolkit, or downloadable from the City & Guilds website.

Regional / national offices will support new centres and appoint a Quality Systems Consultant to guide the centre through the approval process. They will also provide details of the fees applicable for approvals.

Assessments must not be undertaken until qualification approval has been obtained.

City & Guilds reserves the right to withdraw qualification or centre approval for reasons of debt, malpractice or non-compliance with City & Guilds' policies, regulations, requirements, procedures and guidelines, or for any reason that may be detrimental to the maintenance of authentic, reliable and valid qualifications or that may prejudice the name of City & Guilds. Further details of the reasons for suspension and withdrawal of approval, procedures and timescales, are contained in *Providing City & Guilds qualifications.*

Appendix 4   Summary of City & Guilds assessment policies

Health and safety

The requirement to follow safe working practices is an integral part of all City & Guilds qualifications and assessments, and it is the responsibility of centres to ensure that all relevant health and safety requirements are in place before learners start practical assessments.

Equal opportunities

It is a requirement of centre approval that centres have an equal opportunities policy (see *Providing City & Guilds qualifications)*.

The regulatory authorities require City & Guilds to monitor centres to ensure that equal opportunity policies are being followed.

The City & Guilds equal opportunities policy is set out on the City & Guilds website, in *Providing City & Guilds qualifications*, in the *Online Catalogue*, and is also available from the City & Guilds Customer Relations department.

Access to qualifications on the National Qualifications Framework is open to all, irrespective of gender, race, creed, age or special needs. The centre co-ordinator should ensure that no learner is subject to unfair discrimination on any ground in relation to access to assessment and the fairness of the assessment.

Access to assessment

Qualifications on the National Qualifications Framework are open to all, irrespective of gender, race, creed, age or special needs. The centre co-ordinator should ensure that no learner is subject to unfair discrimination on any ground in relation to access to assessment and the fairness of the assessment.

City & Guilds' *Access to assessment and qualifications guidance and regulations* document is available on the City & Guilds website. It provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for learners who are eligible for adjustments in assessment.

Access arrangements are pre-assessment adjustments primarily based on history of need and provision, for instance the provision of a reader for a visually impaired learner.

Special consideration refers to post-examination adjustments to reflect temporary illness, injury or indisposition at the time of the assessment.

Appeals

Centres must have their own, auditable, appeals procedure that must be explained to learners during their induction. Appeals must be fully documented by the quality assurance co-ordinator and made available to the external verifier and/or City & Guilds.

Further information on appeals is given in *Providing City & Guilds qualifications*. There is also information on appeals for centres and learners on the City & Guilds website or available from the Customer Relations department.

Appendix 5   Funding

City & Guilds does not provide details on funding as this may vary between regions.

Centres should contact the appropriate funding body to check eligibility for funding and any regional/national arrangements which may apply to the centre or learners.

For funding regulatory purposes, learners should not be entered for a qualification of the same type, level and content as that of a qualification they already hold.

Please see the table below for where to find out more about the funding arrangements.

Nation	Who to contact	For higher level qualifications
England	The Learning and Skills Council (LSC) is responsible for funding and planning education and training for over 16-year-olds. Each year the LSC publishes guidance on funding methodology and rates. There is separate guidance for further education and work-based learning. Further information on funding is available on the Learning and Skills Council website at **www.lsc.gov.uk** and, for funding for a specific qualification, on the Learning Aims Database **http://providers.lsc.gov.uk/lad**.	Contact the Higher Education Funding Council for England at **www.hefce.ac.uk**.
Scotland	Colleges should contact the Scottish Further Education Funding Council, at **www.sfc.co.uk**. Training providers should contact Scottish Enterprise at **www.scottish-enterprise.com** or one of the Local Enterprise Companies.	Contact the Scottish Higher Education Funding Council at **www.shefc.ac.uk**.
Wales	Centres should contact the Department for Education, Lifelong Learning and Skills (DELLS): **www.wales.gov.uk**	Centres should contact the Department for Education, Lifelong Learning and Skills (DELLS): **www.new.wales.gov.uk**
Northern Ireland	Please contact the Department for Employment and Learning at **www.delni.gov.uk**.	Please contact the Department for Employment and Learning at **www.delni.gov.uk**.

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