



## **National unit specification**

### **General information**

**Unit title:** Dental Custom Trays (SCQF level 6)

**Unit code:** HK6E 46

**Superclass:** PF

**Publication date:** April 2017

**Source:** Scottish Qualifications Authority

**Version:** 01

### **Unit purpose**

This unit has been designed to develop the learner's knowledge, understanding and practical skills in the construction of dental custom made trays.

Learners will examine the types and purposes of custom trays and the materials used, producing custom made trays to the specification and quality required whilst ensuring safe working practices are applied throughout.

This is an introductory unit, mandatory within the National Certificate in Dental Technology at SCQF level 6, so is appropriate for trainee dental technicians.

### **Outcomes**

On successful completion of the unit the learner will be able to:

- 1 Describe the properties and appropriate uses of a range of dental custom made trays.
- 2 Produce custom trays to the specified standard and prescription, ensuring safe working practices at all times.
- 3 Evaluate the quality of the custom trays produced.

### **Credit points and level**

0.5 National unit credits at SCQF level 6: (3 SCQF credit points at SCQF level 6)

## **General information (cont)**

**Unit title:** Dental Custom Trays (SCQF level 6)

### **Recommended entry to the unit**

Access to this unit is at the discretion of the centre. It would be helpful if learners had successfully completed or be working towards the unit *Dental Care Professionals: Fitness to Practice*.

### **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

### **Context for delivery**

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

### **Equality and inclusion**

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## **National unit specification: Statement of standards**

### **Unit title: Dental Custom Trays (SCQF level 6)**

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

#### **Outcome 1**

Describe the properties and appropriate uses of a range of dental custom made trays.

##### **Performance criteria**

- (a) Describe the construction, purpose and uses of custom trays.
- (b) Describe the types of materials used for custom tray construction and their properties.
- (c) Describe types of custom trays including partial and complete trays for both dentate and edentulous casts.

#### **Outcome 2**

Produce custom trays to the specified standard and prescription ensuring safe working practices at all times.

##### **Performance criteria**

- (a) Construct three light — cured custom trays
  - (i) 1 x Light cure F/- Mucocompressive intraoral handle
  - (ii) 1 x Light cure -/F Mucostatic extraoral handle
  - (iii) 1 x Light cure P/- with stops extraoral handle

#### **Outcome 3**

Evaluate the quality of the custom trays produced.

##### **Performance criteria**

- (a) Accurately assess the quality of three different light-cured custom trays
  - (i) 1 x Light cure F/- Mucocompressive intraoral handle
  - (ii) 1 x Light cure -/F Mucostatic extraoral handle
  - (iii) 1 x Light cure P/- with stops extraoral handle

## National unit specification: Statement of standards (cont)

**Unit title:** Dental Custom Trays (SCQF level 6)

### Evidence requirements for this unit

Evidence is required to demonstrate that learners have achieved all outcomes and performance criteria.

Learners should be presented with real or simulated projects and will be given a clear brief to ensure that they have the opportunity to achieve all the performance criteria.

Evidence must be provided to show that learners can demonstrate understanding of materials, terminology, practices and techniques related to the production of dental custom trays. Evidence must also be provided to show that learners can apply relevant knowledge and skills in a practical context.

Learners will be required to demonstrate safe working practices, including infection prevention and control during the practical aspects of delivery and assessment of this unit.

For **Outcome 1**, learners must provide evidence of the following in closed-book conditions:

Description of types of custom trays for partial and complete dentures:

- ◆ Mucocompressive
- ◆ Mucostatic
- ◆ Close fitting trays
- ◆ Spaced custom trays

Description of types of materials should include:

- ◆ Light cure
- ◆ Shellac
- ◆ Self and heat cured acrylic resin
- ◆ Vacuum formed plastic
  
- ◆ Description of custom trays:
- ◆ Partial and complete trays for both dentate and edentulous casts

Outcome 2 — Product evidence must be produced under supervised conditions to show that the learner can construct three different types of custom trays to a specified standard and prescription:

- (i) Light cure F/- Mucocompressive intraoral handle
- (ii) Light cure -/F Mucostatic extraoral handle
- (iii) Light cure P/- with stops extraoral handle

The trays must be constructed in consideration of the following:

Anatomical landmarks

Upper: labial sulcus, buccal sulcus, hamular notch, fovea palatina, muscle attachments

Lower: labial sulcus, buccal sulcus, retromolar pad, lingual sulcus, muscle attachments

Custom tray handle: (position for dentate trays and edentulous trays; intra- oral, extra –oral or finger stop)

## **National unit specification: Statement of standards (cont)**

**Unit title:** Dental Custom Trays (SCQF level 6)

### **Outcome 2**

The learner must ensure the following;  
Safe use of equipment, use of Personal Protective Equipment (PPE), cleanliness and tidiness.

### **Outcome 3**

Product evidence must be produced to show that learners can accurately assess the quality of the three custom trays constructed in terms of the correct interpretation of the prescription and completion of a quality checklist:

- ◆ Preparation of casts
- ◆ Fit and coverage of bases
- ◆ Thickness of material
- ◆ Handle
- ◆ Quality of finish



## National unit support notes

**Unit title:** Dental Custom Trays (SCQF level 6)

Unit support notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 20 hours.

### Guidance on the content and context for this unit

This introductory unit forms part of the NC in Dental Technology at SCQF level 6. It will develop learner's knowledge, understanding and practical skills in the construction of custom trays.

Where this unit is delivered as part of a national course it would be beneficial if learners had completed or are working towards other relevant units.

Outcome 1 provides learners with the underpinning knowledge of the types and purposes of custom trays and their materials.

This will prepare learners for the practical activities in Outcomes 2 and 3.

Outcome 2 is practical and provides learners with the opportunity to develop their skills in constructing custom trays. The importance of safe working practices and infection prevention and control should be emphasised during this outcome.

Construction process will include:

- 1 Adapt softened modelling wax onto the model
- 2 Plaster separating solution applying on the plaster surface
- 3 Apply a light-curing acrylic blank over the wax spacers
- 4 Light-cure in a light box
- 5 Construction of handles (depends on type of tray)
- 6 Finishing
- 7 To provide mechanical retention, tray should have drilled 2mm diameter holes

Outcome 3 is practical and provides learners with the opportunity to learn how to assess the quality of the custom trays constructed. Quality should be reviewed against the original requirements of the prescription and a quality checklist. The importance of safe working practices and infection prevention and control should be emphasised during this outcome.

## National unit support notes (cont)

**Unit title:** Dental Custom Trays (SCQF level 6)

### Guidance on approaches to delivery of this unit

The learning and teaching around constructing custom trays is most effective when concepts, principles and theories are set in a relevant context, eg by making reference to applications of custom trays in real life situations. There is scope for integration with other units, in particular *Dental Anatomy: an Introduction* and *Dental Cast Production: an Introduction*.

Learning and teaching approaches can include lectures, practical demonstrations, group work and individual exercises. The practical work can be reinforced from, eg moodle and worksheets. Resources used could include examples of custom trays and audio visual material.

Broader informal discussions may be incorporated to clarify difficulties and it may be beneficial to discuss emerging technologies and industry constraints, eg timescales.

### Guidance on approaches to assessment of this unit

An appropriate assessment method for Outcome 1 would be via a range of short answer or restricted response questions — this could be paper based assessment or e-assessment and would allow for integration of assessment of knowledge from other relevant units.

Outcome 2 may be assessed via observation of practice using an observation checklist (including safe working) and if necessary additional questioning, to establish the learners underpinning knowledge and understanding.

Outcome 3 can be assessed through the submission of quality assurance checklists, completed by the learner, either under observation conditions or submitted for consideration with the final products of Outcome 2.

Use of observation will allow centre staff to verify that products produced are the learners own work and authenticate evidence.

### Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit, particularly Outcome 1. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at [www.sqa.org.uk/e-assessment](http://www.sqa.org.uk/e-assessment).

## National unit support notes (cont)

**Unit title:** Dental Custom Trays (SCQF level 6)

### Opportunities for developing Core and other essential skills

There will be opportunities to develop aspects of the Core Skills in *Communication* (Oral and Written skills) and *Information and Communication Technology (ICT)* (Accessing Information), *Numeracy* (Graphical Information, Using Number — Measuring and Calculation), *Working with Others* (Working Co-operatively with Others) and *Problem Solving* (Critical Thinking) throughout this unit.

There may also be opportunities to develop broader transferable skills which contribute to employability:

- ◆ Time management and organisational skills — through working to deadlines, punctuality, record keeping
- ◆ Sustainability — through consideration of the use of resources, recycling and waste
- ◆ Specific technical skills — through preparing, handling, constructing and assessing custom trays
- ◆ Interpersonal skills such as listening, teamwork and study skills
- ◆ Personal development, eg self-confidence and self-motivation



## History of changes to unit

Version	Description of change	Date

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## General information for learners

### Unit title: Dental Custom Trays (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit has been designed to develop knowledge, understanding and practical skills in the construction of custom trays and is suitable for trainee Dental Technicians.

It is an introductory unit which forms part of the NC in Dental Technology at SCQF level 6.

If you undertake this unit, you will learn about the types and purposes of custom trays and the materials used, producing custom made trays to the specification and quality required whilst ensuring safe working practices are applied throughout

There are three outcomes to complete:

- 1 Describe the properties and appropriate uses of a range of dental custom made trays.
- 2 Produce Custom Trays to the specified standard and prescription ensuring safe working practices at all times.
- 3 Evaluate the quality of the custom trays produced.

Assessment methods are varied and may include set question papers and observation of your practice.

There will be opportunities to develop aspects of the Core Skills in *Communication* (Oral and Written skills) and *Information and Communication Technology (ICT)* (Accessing Information), *Numeracy* (Graphical Information, Using Number — Measuring and Calculation), *Working with Others* (Working Co-operatively with Others) and *Problem Solving* (Critical Thinking) throughout this unit.

There may also be opportunities to develop your broader transferable skills which contribute to employability:

- ◆ Time management and organisational skills — through working to deadlines, punctuality, record keeping
- ◆ Sustainability — through consideration of the use of resources, recycling and waste
- ◆ Specific technical skills — through preparing, handling, producing and assessing dental casts
- ◆ Interpersonal skills such as listening, teamwork and study skills
- ◆ Personal development, eg self-confidence and self-motivation