



## National unit specification

### General information

**Unit title:** Dental Surveying (SCQF level 6)

**Unit code:** HK6G 46

**Superclass:** PF

**Publication date:** April 2017

**Source:** Scottish Qualifications Authority

**Version:** 01

### Unit purpose

This unit has been designed to develop learner's knowledge, understanding and practical skills in dental surveying. This unit will focus on the preparation and duplication of casts for partial denture construction.

Learners will use surveying instruments in the preparation and duplication of casts for partial dentures to the specification and quality required whilst ensuring safe working practices are applied throughout.

This is a mandatory unit within the National Certificate in Dental Technology so is appropriate for trainee Dental Technicians.

### Outcomes

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

- 1 Describe the parts of the surveyor, the functions of its associated surveying instruments, and the uses of a dental surveyor.
- 2 Survey casts and produce duplicates using surveying instruments.
- 3 Evaluate the quality of the surveyed casts and duplicates.

### Credit points and level

1 National unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6)

## **National unit specification: General information (cont)**

**Unit title:** Dental Surveying (SCQF level 6)

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

Access to this unit is at the discretion of the centre. It is recommended that learners have some prior knowledge of oral anatomy and dental casts. It would be beneficial if learners had successfully completed or are 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 Surveying (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 parts of the surveyor, the functions of its associated surveying instruments, and the uses of a dental surveyor.

##### **Performance criteria**

- (a) Identify the parts of the surveyor.
- (b) Describe the functions of its associated surveying instruments.
- (c) Outline the uses of a dental surveyor.
- (d) Describe the purpose of survey lines and how they are classified.

#### **Outcome 2**

Survey casts and produce duplicates using surveying instruments.

##### **Performance criteria**

- (a) Survey the P/P (upper and lower partial denture) casts to the prescription and produce duplicates ensuring safe working practices.

#### **Outcome 3**

Evaluate the quality of the surveyed casts and duplicates.

##### **Performance criteria**

- (a) Accurately assess the quality of surveyed P/P casts and duplicates to the prescription.

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

**Unit title:** Dental Surveying (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 information, materials, terminology, practices and techniques related to dental surveying. 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:

- ◆ identification of the parts of the surveyor
- ◆ description of the functions of its associated surveying instruments
- ◆ an outline of the uses of a dental surveyor
- ◆ description of the purpose of survey lines and how they are classified

The evidence should include reference to the following P/P dentures:

- ◆ P/P dentures to the prescription

For **Outcome 2**, evidence must be produced under supervised conditions to show that learners can survey the following partially dentate casts to the given prescription, ensuring safe working practices at all times:

- ◆ P/P dentures

For **Outcome 3**, product evidence must be produced to show that learners can assess the quality of the two dental surveys, and duplicated casts constructed in terms of their accuracy to the given prescription.



## National unit support notes

### Unit title: Dental Surveying (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 40 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 dental surveying. 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, eg *Dental Anatomy: an Introduction*

Outcome 1 provides learners with the underpinning knowledge of the parts of the surveyor, the functions of its associated surveying instruments, and the uses of a dental surveyor, as well as the purpose of survey lines and how they are classified.

Types of dental surveying instruments include:

- 1 Analyzing rod
- 2 Carbon marker
- 3 Undercut gauges
- 4 Chisel

Types of dental undercuts:

- 1 Undercuts for clasp retention
- 2 Unusable undercuts

Survey line types:

- 1 Indicate non-undercut area of tooth or tissue
- 2 Indicate undercut area
- 3 Identification of usable and unusable undercuts
- 4 Suggest the type of clasp

The completion of Outcome 1 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 dental surveying to a given prescription. The importance of safe working practices and infection prevention and control should be emphasised during this outcome.

Learners will survey and duplicate P/P casts to the given prescription:

- ◆ P/P models/casts

## National unit support notes (cont)

**Unit title:** Dental Surveying (SCQF level 6)

Construction process will include:

- 1 Surveying P/P models
- 2 Blocked out P/P models
- 3 Paralleling the blocked-out area
- 4 Duplication of models

The information provided on prescriptions will include:

- 1 Patient's data
- 2 Dentist's data
- 3 Dental order

Outcome 3 will provide learners with the opportunity to learn how to assess the accuracy of the dental surveying. The final product will be compared to the given prescription requirements as detailed in Outcome 2.

### Guidance on approaches to delivery of this unit

The learning and teaching of constructing dental surveying is most effective when concepts, principles and theories are set in a relevant context, eg by making reference to their applications in real life situations. There is scope for integration with other introductory units, eg *Dental Care Professionals: Fitness to Practice*

Learning and teaching approaches should 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 dental record blocks 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 and costs

### Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

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

## National unit support notes (cont)

### Unit title: Dental Surveying (SCQF level 6)

Outcome 2 may be assessed via observation of practice using an observation checklist 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 3.

### 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).

### 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, producing and assessing dental surveying
- ◆ 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 Surveying (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 dental surveying 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 preparation and duplication of casts for partial denture construction.

It would be beneficial if you had already successfully completed the unit, *Dental Cast Production: an Introduction*

There are three outcomes to complete:

- 1 Describe the parts of the surveyor, the functions of its associated surveying instruments, and the uses of a dental surveyor.
- 2 Survey casts and produce duplicates using surveying instruments.
- 3 Evaluate the quality of the surveyed casts and duplicates.

Assessment methods are varied and may include labelling diagrams, 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 surveys
- ◆ Interpersonal skills such as listening, teamwork and study skills
- ◆ Personal development, eg self-confidence and self-motivation