

Higher National Unit specification



General information for centres

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

Unit code: F3G8 35

Unit purpose: This Unit is designed to extend the candidates understanding of complete denture construction. The Unit allows the candidate to develop the necessary knowledge and skills to allow them to construct and finish complete dentures on adjustable articulators and incorporate additions to specific prescriptions.

On completion of the Unit the candidate will be able to:

- 1 Evaluate the role of semi and fully adjustable articulators, tooth shape/position and denture base design in complete denture construction.
- 2 Perform the articulation and tooth setting of complete upper and lower dentures from a facebow registration.
- 3 Perform aesthetic and clinical prescription requirements on complete dentures.

Credit points and level: 2 HN credits at SCQF level 8: (16 SCQF credit points at SCQF level 8*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Although access to this Unit is at the discretion of the centre, it is recommended that the candidate should have completed the HNC in Dental Technology or equivalent so that dental laboratory practice, working to a prescription, treatment planning skills and preparing products to a standard suitable for presentation to a clinical dental professional are established.

Core Skills: There are opportunities to develop the component 'Written Communication' of the Core Skill *Communication* at SCQF level 6, and the components 'Planning and Organising', 'Reviewing and Evaluating' and 'Critical Thinking' of the Core Skill *Problem Solving* at SCQF level 6 in this Unit. There are also opportunities to develop the Core Skill *Information Technology* at SCQF level 6, and the component 'Using Graphical Information' of the Core Skill *Numeracy* at SCQF level 6, although there is no automatic certification of Core Skills or Core Skills components.

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.

Assessment: This Unit could be assessed using a candidate submission covering all of the knowledge and skills, and practical tasks.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Evaluate the role of semi and fully adjustable articulators, tooth shape/position and denture base design in complete denture construction

Knowledge and/or Skills

- ◆ Semi and fully adjustable articulators
- ◆ Influence of tooth shape and position and denture base design

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can evaluate:

- ◆ the characteristics of a semi-adjustable and a fully-adjustable articulator
- ◆ tooth shape and position and denture base design and their impact on denture stability, retention, phonetics, aesthetics and patient masticatory efficacy

Assessment Guidelines

The underpinning knowledge of this Outcome could be assessed in the form of a student submission. Whilst the format the submission takes is left to the discretion of the centre the author would recommend that such a submission be the equivalent to 1,500 words (excluding appendices and diagrams). The submission may be presented in any suitable way to ensure DDA compliance. Examples of suitable formats are: oral questioning; candidate presentation; candidate report and are detailed in the support notes.

Higher National Unit specification: statement of standards (cont)

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

Outcome 2

Perform the articulation and tooth setting of complete upper and lower dentures from a facebow registration

Knowledge and/or Skills

- ◆ Facebow registrations
- ◆ Registration wafer transfers
- ◆ Tooth setting in balanced articulation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ mount two sets of casts onto an adjustable articulator using the record blocks and facebow registration provided
- ◆ set the condylar guidance angles for each case using the supplied (protrusive and lateral) registration wafers
- ◆ set teeth for two tooth trials: one Angle's Class I and one from either, Angle's Class II Div 1, Angle's Class II Div 2, or Angle's Class III in balanced articulation

Working to a prescription, candidates must articulate the casts accurately and set the artificial teeth in balanced articulation with the tooth setting tasks taking place under timed controlled conditions, each tooth setting taking no longer than 3 hours. The components should be finished to an accuracy ready for delivery to the dental surgeon for trial in the patient's mouth.

These practical tasks must be carried out within a dental laboratory setting.

Assessment Guidelines

The assessment of this Outcome could be by practical demonstration on the part of the candidate. The candidate may produce two sets of mounted casts representing two Angle's jaw relationships. An Angle's Class I jaw relationship and either: Class II Div 1, Class II Div 2, or Class III. The casts could be mounted on an adjustable articulator with individualised condylar guidance angles.

Higher National Unit specification: statement of standards (cont)

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

Outcome 3

Perform aesthetic and clinical prescription requirements on complete dentures

Knowledge and/or Skills

- ◆ Gingival contouring and stippling techniques
- ◆ Tooth characterisation
- ◆ Denture base staining

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ work to a prescription and use the tooth setting completed in Outcome 2, candidates must:
 - produce one set of finished complete dentures to a given prescription incorporating:
 - Gingival contour and Stipple
 - Gingival staining
 - Tooth characterisation

The components should be finished to an accuracy ready for delivery to the dental surgeon for trial in the patient's mouth.

These practical tasks must be carried out within a dental laboratory setting.

Assessment Guidelines

The candidate could produce one set of complete dentures finished in acrylic resin incorporating aesthetic and clinical prescription requirements.

Administrative Information

Unit code: F3G8 35

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

Superclass category: PF

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Higher National Unit specification: support notes

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours.

Guidance on the content and context for this Unit

The purpose of this Unit is to allow the candidate to extend their understanding of setting teeth in balanced articulation in complete denture construction. The Unit allows the candidate to develop the necessary knowledge and skills to allow them to construct and finish complete dentures on adjustable articulators and incorporate additions to specific prescriptions

Outcome 1

In this Outcome the candidate could become familiar with the characteristics of semi-adjustable and fully-adjustable articulators and their role in complete denture construction. The Outcome may also offer the opportunity to build on the candidate prior knowledge of denture stability, retention, phonetics, aesthetics and masticatory efficacy.

Outcome 2

This Outcome may cover the processes involved in the articulation of casts onto an adjustable articulator using the record blocks and facebow registration. The Outcome should also cover how to set the condylar guidance angles using protrusive and/or lateral registration wafers.

This Outcome may also build on the candidate prior knowledge and understanding relating to tooth setting from the HNC Unit *Dental Removable Prosthodontics: Complete Dentures*. In this Outcome the candidate could set teeth, in balanced articulation using an adjustable articulator for two tooth trials: one Class I and one from either, Class II Div 1, Class II Div 2, or Class III in balanced articulation.

Outcome 3

This Outcome could introduce tooth and gingival customising using gingival contouring and stippling and staining techniques. The Outcome also offers the opportunity for the candidate to demonstrate the technique of individual tooth characterisation.

Guidance on the delivery and assessment of this Unit

It is envisaged that the teaching of this Unit could be delivered through lecturer-mediated discussion, practical demonstrations, reading of recommended texts and professional peer-review journals.

This Unit offers the opportunity to introduce the candidates to self and peer assessment as a formative assessment method. Such an initiative as well as providing both the candidate and the centre with an indication of candidate progress will also help in the development of the candidate's critical skills. A possible example would be to ask the candidates to develop quality criteria for the articulation of the dental casts and the tooth setting in Outcome 2 as a group work activity, evaluate their own performance and that of a peer against this agreed set of criteria.

Higher National Unit specification: support notes (cont)

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

Outcome 1 could be assessed by a candidate submission. Whilst the format the submission takes is left to the discretion of the centre the author would recommend that such a submission be the equivalent to 1,500 words (excluding appendices and diagrams). Examples of possible submission types are:

Oral Questioning

The underpinning knowledge and skills could be assessed using the form of oral questioning. The centre would need to develop a bank of suitable questions of equal reliability and validity to ensure that each candidate is assessed appropriately ensuring coverage of all underpinning knowledge. If this format is selected careful consideration is required in relation to venue, etc. The author would suggest that such a format would require to be carried out in time-controlled conditions.

Candidate Presentation

A candidate presentation could take the form of an oral presentation by the candidate to their peers and teaching staff. Such a submission would need time to be prepared and therefore careful consideration will need to be given as to when the assessment is given to the candidate to allow time for research and preparation. The candidate may use presentation software such as PowerPoint to aid the presentation delivery but this is not essential. The candidate may opt to produce and talk to a handout supplied to the group. Using such software could give the candidate the opportunity to develop their Core Skills in *Information Technology*.

Candidate Report

A candidate report may be presented in a variety of suitable ways, oral, written or signed. The author would suggest that if a candidate report is selected as the chosen assessment format that this should have a conventional structure ie title page; table of contents; introduction; report body; conclusion(s); reference list. Such a submission would need time to be prepared and therefore careful consideration will need to be given as to when the assessment is given to the candidate to allow time for research and preparation.

The assessment of Outcome 2 will be by practical demonstration on the part of the candidate. The candidate will produce two sets of mounted casts on an adjustable articulator with individualised condylar guidance angles. On these mounted casts the candidate will set teeth under timed controlled conditions, each tooth setting should take no longer than 3 hours. The rationale for having the practical exercise time-controlled is because of employer expectations. There will be a requirement for candidates who successfully complete the Group Award to work within the Dental Technology Profession under constant time restrictions.

The assessment of Outcome 3 will be by practical demonstration on the part of the candidate. The candidate will produce one set of complete dentures finished in acrylic resin incorporating aesthetic and clinical prescription requirements.

Higher National Unit specification: support notes (cont)

Unit title: Dental Removable Prosthodontics: Complex Complete Dentures

Opportunities for developing Core Skills

In completing the class work of Outcome 1 candidates may have the opportunity to develop the component 'Written Communication' of the Core Skill *Communication* at SCQF level 6. Candidates may have the opportunity to analyse and evaluate complex information from a variety of dental literature sources. The general skill that the candidate may have to complete is 'Read and understand complex written communication'.

If the candidate was to produce a report for Outcome 1, they will have the opportunity to develop the component 'Written Communication' of the Core Skill *Communication* at SCQF level 6. Candidates may have to structure their report, which could include complex vocabulary, accurately and using a logical structure. The general skill that candidates may have to complete is 'Produce well-structured written communication on complex topics'.

If the candidate produces a report for Outcome 1 there is the opportunity for the candidate to develop the Core Skill *Information Technology* at SCQF level 6. Candidates could carry out searched of information databases while carrying out research for the report.

There is also the opportunity for the candidate to develop the components 'Planning and Organising' and 'Reviewing and Evaluating' of the Core Skill *Problem Solving* at SCQF level 6 while completing the class work of Outcomes 2 and 3. In these Outcomes the candidate will produce two pieces of practical work and carryout clinical prescriptive additions, this will require the candidate to organise, plan and review the procedures involved in the task.

There is the opportunity for the candidate to develop the component 'Critical Thinking' of the Core Skill *Problem Solving* at SCQF level 6 while completing the Evidence Requirements for Outcome 1. The candidate may be required to evaluate complex information, clarify the role of semi and fully adjustable articulators, tooth shape and or position and denture base design and their impact on complete denture construction. The general skill that candidates may have to complete is 'Analyse a complex situation or issue'.

There is the opportunity to develop the component 'Using Graphical Information' of the Core Skill *Numeracy* at SCQF level 6. When articulating the casts and setting the teeth in Outcome 2 and performing aesthetic and clinical requirement while finishing the denture in Outcome 3 candidates will have to interpret complex data presented in graphical form from numerous dental material manufacturers. The general skill that candidates may have to complete is 'Apply a wide range of graphical skills to interpret and present complex information in generalised contexts'.

Open learning

This Unit could be delivered by distance learning, which may incorporate some degree of online support. With regard to assessment, planning would be required of the centre concerned to ensure the sufficiency and authenticity of the candidate evidence. Outcome 3 requires to be assessed within a dental laboratory setting.

Higher National Unit specification: support notes (cont)

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Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (www.sqa.org.uk).

General information for candidates

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This Unit is designed to develop your knowledge and understanding to become competent at complete denture construction. In this Unit you will develop the necessary knowledge and skills to allow you to construct and finish complete dentures on adjustable articulators and incorporate additions to specific prescriptions.

The Unit has three main areas, each the subject of a separate Outcome. Firstly you will be evaluating the principles involved in complete denture construction; this will build on your knowledge and understanding from the HNC in Dental Technology. You will then construct two sets of complete dentures, and finally carryout additions to these following clinical prescription requirements.

The formal assessment of this Unit may consist of a practical assessment for Outcomes 2 and 3 and two reports for Outcomes 1. The assessment for Outcomes 1 may be carried out at the end of delivery of the Unit. The practical exercises should be carried out within a dental laboratory setting.

In completing the class work and assessments of this Unit you may have the opportunity to develop the component 'Written Communication' of the Core Skill *Communication* at SCQF level 6, and the components 'Planning and Organising', 'Reviewing and Evaluating' and 'Critical Thinking' of the Core Skill *Problem Solving* at SCQF level 6 in this Unit. There are also opportunities to develop the Core Skill *Information Technology* at SCQF level 6, and the component 'Using Graphical Information' of the Core Skill *Numeracy* at SCQF level 6.