



Higher National Unit specification

General information for centres

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

Unit code: F43N 35

Unit purpose: This Unit is designed to enable candidates to develop their knowledge and skills in the use of veneers and inlays in fixed prosthodontics. It prepares them for this by giving them the underpinning knowledge they will need to enable them to produce dental veneers and inlays.

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

- 1 Evaluate the use of porcelain veneers and porcelain-composite inlays.
- 2 Construct porcelain veneers.
- 3 Construct one porcelain and one composite inlay.

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 candidates 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. The ability to prepare submissions to a standard format, which includes Harvard referencing, would also be preferable.

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, and Working with Others at SCQF level 5 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 for Outcome 1. Outcomes 2 and 3 are assessed by practical tasks carried out within a dental laboratory setting. The practical evidence for Outcome 3 will be supported by a submission covering classification skills.

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 use of porcelain veneers and porcelain-composite inlays

Knowledge and/or Skills

- ◆ Porcelain veneers
- ◆ Porcelain-composite veneers
- ◆ Tooth selection
- ◆ Acid etching
- ◆ Bonding materials
- ◆ Bonding techniques

Evidence Requirements

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

- ◆ with the aid of diagrams, the use of porcelain veneers and porcelain-composite inlays in fixed prosthodontics
- ◆ the process of acid etching the contact surfaces of tooth and veneers or inlay
- ◆ four materials available to bond veneers and inlays to teeth

Candidates will:

- ◆ explain the selection process for which teeth are suitable and unsuitable for single and adjacent veneers and inlays
- ◆ compare bonding techniques available to bond veneers and inlays to teeth in terms of: complexity, ease of use, cost, availability, durability and indicators and contra indicators

Assessment Guidelines

This Outcome could be assessed in the form of a candidate submission. Whilst the format the submission takes is left to the discretion of the centre it is recommended 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 Disability Discrimination Act (DDA) compliance. Examples of suitable formats are: oral questioning; candidate presentation; candidate report. Further details are contained in the Support Notes.

Higher National Unit specification: statement of standards (cont)

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

Outcome 2

Construct porcelain veneers

Knowledge and/or Skills

- ◆ Model production
- ◆ Silicone impression construction
- ◆ Investment models
- ◆ Porcelain
- ◆ Acid etching technique
- ◆ Finishing techniques

Evidence Requirements

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

- ◆ two adjacent central incisor porcelain veneers
- ◆ four porcelain veneers in the anterior segment

Candidates will construct six veneers in total. Working to a prescription, candidates must ensure that for each practical exercise: the model; silicone impression; and investment model are all prepared accurately. The veneers must be produced to the standard for oral aesthetics, etched ready for placement and finished to an accuracy ready for delivery to the dental surgeon for trial in the patient's mouth.

These practical assessment 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 could produce two porcelain veneers on anterior sited adjacent central incisors and four porcelain veneers in the anterior segment - six veneers in total.

Higher National Unit specification: statement of standards (cont)

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

Outcome 3

Construct one porcelain and one composite inlay

Knowledge and/or Skills

- ◆ Black's Inlay Classification
- ◆ Porcelain inlay
- ◆ Composite inlay
- ◆ Finishing techniques

Evidence Requirements

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

- ◆ one porcelain inlay for a Black's Class 2 inlay preparation

Working to a prescription, candidates must ensure that the model, silicone impression, and investment model are all prepared accurately, the porcelain inlay is constructed to a standard acceptable for oral aesthetics with the contact surface acid etched and the component finished to an accuracy ready for delivery to the dental surgeon for trial in the patient's mouth.

- ◆ one composite inlay for a Black's Class 2 inlay preparation

Working to a prescription, candidates must ensure that: the model is accurately prepared, the composite is accurately applied and hardened and the composite inlay properly contoured, polished and tempered ready for delivery to the dental surgeon for trial in the patient's mouth.

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

The practical assessments will be supported by evidence demonstrating the candidate's knowledge of:

- ◆ Black's Inlay Classification system

Assessment Guidelines

The candidate may produce a table to explain the Black's Classification system of cavities.

Administrative Information

Unit code: F43N 35

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

Superclass category: PF

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Higher National Unit specification: support notes

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

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 candidates to develop knowledge, understanding and skills in the use of veneers and inlays in fixed prosthodontics. This will enable candidates to become competent in the production of dental veneers and inlays. It is envisaged that the teaching of this Unit could be delivered through lecturer mediated discussion, practical demonstrations and the reading of recommended texts.

Outcome 1

In this Outcome candidates should become familiar with the appropriate tooth selection for veneers and inlays dentures through lecturers and practical tasks.

This Outcome will also develop the candidate's knowledge and understanding of the process of acid etching the tooth and veneer or inlay surfaces, materials used and techniques available.

The candidate's knowledge, relating to bonding materials and techniques, will be expanded. Research and class notes will provide details of the range of materials and systems currently available.

Outcome 2

In this Outcome candidates will produce porcelain veneers to prescription. Two adjacent veneers on central incisors and four adjacent veneers, also in the anterior segment, should be produced.

Outcome 3

This Outcome looks at Black's Classification for Inlays. Candidates should be able to explain the Classifications 1–5 and construct two inlays: one porcelain and one composite with all appliances finished accurately for delivery.

Guidance on the delivery and assessment of this Unit

This Unit is likely to form part of a Group Award designed to provide candidates with technical and professional knowledge and skills for employment within a dental technology environment. 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 candidates to develop quality criteria for the veneers and inlays being constructed in Outcomes 2 and 3 respectively 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 Fixed Prosthodontics: Veneers and Inlays

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.

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 candidates 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 candidates to allow time for research and preparation.

The assessment of Outcomes 2 and 3 will be in the form of practical tasks involving the candidate in producing six porcelain veneers and one porcelain inlay and one composite inlay, to a given prescription. These practical tasks must be carried out within a dental laboratory setting. Evidence is required of the candidates' ability to use Black's Classification for Inlays.

Opportunities for developing Core Skills

In completing the evidence tasks for 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 candidates produce a written report for Outcome 1, they may 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'.

Higher National Unit specification: support notes (cont)

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

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 searches 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 construct eight complex pieces of practical work that 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 analyse and evaluate complex information, to explain the use of porcelain veneers and porcelain-composite inlays in fixed prosthodontics. 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 constructing the veneers and inlays 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 by the centre to ensure the sufficiency and authenticity of the candidate evidence. Outcomes 2 and 3 require to be assessed within a dental laboratory setting.

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

Unit title: Dental Fixed Prosthodontics: Veneers and Inlays

This Unit is designed to develop your knowledge and skills to be competent in the construction of dental veneers and inlays.

The Unit has three main areas, each the subject of a separate Outcome. Firstly, you will evaluate the uses and types of porcelain veneer and porcelain and composite inlays. You will then construct six veneers in Outcome 2. Finally, in Outcome 3, you will look at Black's Inlay Classification system and construct two inlays — one porcelain and one composite.

The formal assessment of this Unit may consist of a report for Outcome 1 and practical assessments for Outcomes 2 and 3. The assessment for Outcome 1 may be carried out at the end of delivery of the Unit. The practical assessment tasks 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 and Working with Others at SCQF level 5 although there is no automatic certification of Core Skills or Core Skills components.