



T Level Technical Qualification in Health

Occupational specialism assessment (OSA)

Dental Nursing

Assignment 4 - Objective structured clinical examination
(OSCE) - Distinction

Guide standard exemplification materials (GSEM)

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Introduction

The material within this document relates to the Dental Nursing occupational specialism sample assessment. These exemplification materials are designed to give providers and students an indication of what would be expected for the lowest level of attainment required to achieve a pass or distinction grade.

The examiner commentary is provided to detail the judgements examiners will undertake when examining the student work. This is not intended to replace the information within the qualification specification and providers must refer to this for the content.

In assignment 4, the student must complete a series of clinical tasks that will provide opportunity for them to demonstrate occupational competence to meet the requirements of licence to practise.

After each live assessment series, authentic student evidence will be published with examiner commentary across the range of achievement.

Station 1: mixing alginate

(9 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions, and equipment list before starting the observation
- you have a further 10 minutes to complete the observation

Observation description

- you are required to mix alginate to the correct consistency; a second mix of alginate may be attempted if you are dissatisfied with the first mix

You must also:

- select, apply and wear personal protection equipment (PPE) correctly
- prepare the equipment prior to mixing
- dispose of all excess material

Once you are happy with your mix, you must inform your internal provider assessor.

Equipment

You have been provided with the following material and equipment:

- sterilisation materials
- curved spatula
- rubber mixing bowl
- alginate material
- alginate adhesive
- tepid water
- measuring cup
- silicon based material (crown prep)
- glass slab
- masks
- gloves
- apron
- visor
- disinfectant wipes
- orange clinical bag

Student evidence

I observe the student select the correct PPE and apply in the correct order. The student disinfects the surfaces and equipment to be used.

I observe the student invert the alginate before commencing, then I observe the student fill up the measuring scoop, level off with the spatula and add the correct number of scoops to the bowl without hesitation.

The student then correctly uses the measuring cup and fills with room temperature water.

I observe the student carry out the correct technique, spatulating vigorously for 3 minutes before showing me the mixture, which is of a smooth, creamy consistency with no air bubbles, then applying the prepared material ready to load into the tray.

I observe the student wipe away excess material and dispose of it in a clinical bag and clean and disinfect the spatula.

Station 2: medical emergency

(6 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions, and equipment list before starting the observation
- you have been provided with a simulated patient for this observation
- the internal provider assessor will also play the role of the dentist should you require it
- you have a further 5 minutes to complete the observation
- you have **one** attempt at this observation

Observation description

You must be able to identify the signs and symptoms of the correct medical emergency displayed by the simulating patient (SP).

You are required to:

- assist the unwell patient
- perform the adequate steps for a safe recovery
- choose the correct equipment

Equipment

You have been provided with the following equipment:

- oxygen or access to fresh air flow
- glucogel tube
- salbutamol inhaler

Student evidence

I observe the student accurately diagnose the medical emergency (M/E) without hesitation.

I then observe the student check that the patient was breathing, the student acts in a professional and safe manner for the unwell patient.

I observe the student identify that the patient will need oxygen, taking less than 30 seconds to do so.

I observe the student shouting for help and asks a colleague to retrieve oxygen while the student stays with the patient.

I observe the student give excellent communication with colleagues and is able to deliver instructions in a safe and professional manner. The student clearly states that they require assistance. The student asks their colleague for help by asking them to retrieve the oxygen tank. The student speaks with a calm tone to the patient when dealing with the emergency.

I then observe the student lay the patient down flat, raise patient's legs above their head and remove all objects from around the patient's neck and head.

I observe the student sit the patient forward and place the patient's head downwards/in between legs, in a caring and safe manner.

Station 3: set up for endodontics (root canal treatment)

(6 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 5 minutes to complete the observation
- you have **one** attempt at this observation activity

Observation description

You are required to:

- set up for endodontics with a temporary restoration
- select the correct instruments and materials

Equipment

You have been provided with the following instruments and materials:

Instruments:

- amalgam plugger
- amalgam pot
- ball burnisher
- barbed broach
- briault probe
- Coupland's elevators
- community periodontal index of treatment needs (CPITN) probe
- dental excavator
- diamond bur
- endodontic ruler
- file holder
- flat plastic
- Gates Glidden
- local anaesthetic
- matrix band and holder
- measuring gauge

- mirror
- monojet irrigation syringe
- probe
- reamers/files
- rubber dam kit
- single use endodontics file
- slow and fast handpiece and burs
- syringe
- tweezer
- Wards Carver

Materials:

- alginate
- antiseptic paste (ledermix)
- apex locator
- bitewing film
- calcium hydroxide
- extraction forceps
- finger spreader
- gutta percha points
- hypochlorite/chlorohexidine
- light bodied impression material
- lubricant gel (glyde)
- luting agent
- paper points
- processing solution
- sealing cement
- soft wax
- spiral paste filler
- sutures
- Temp-Bond cement
- temporary dressing material
- time steam and temperature (TST) strip
- X-ray holder

Student evidence

I observe the student selecting the correct instruments for this specific dental treatment without hesitation. They select the mirror, probe, tweezer, flat plastic, amalgam plugger, dental excavator, local anaesthetic, syringe, slow and fast handpiece and burs, endodontic ruler and measuring gauge.

I observe the student use a professional approach to the selection of instruments and materials as they were confident and decisive about placing them in an organised manner on the tray.

I observe the student correctly identify root canal treatment (RCT) files.

I observe the student confidently choose the correct materials: gutta percha and sealing cement.

I observe the student select the temporary filling material.

The student leaves all irrelevant equipment on the table.

Station 4: extraction post-operative instructions

(12 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list and make some notes before starting the observation
- you have a further 5 minutes to complete the observation
- your internal provider assessor will play the role of the patient
- you have **one** attempt at this observation

Observation description

You are required to give verbal instructions to a patient that has received an upper first molar non-surgical extraction. Before the 5 minute observation begins, you are allowed to make notes about the instructions you will give.

You must:

- include the key factors to prevent infection
- deliver post-op instructions in a clear, jargon-free manner

Equipment

- pen
- paper
- 2 chairs

Student evidence

I observe the student give confident, clear, jargon-free aftercare instructions.

I observe the student explain the common symptoms that come after an extraction; they explain it is normal to experience some pain, bruising or swelling.

I observe the student give clear instructions on pain medicine and how often to take it. The student explains that if the patient should experience pain, painkillers would be recommended. The student explains that paracetamol should be sufficient and not to take more than 8 tablets a day and to spread them out evenly with food. The student explains that if paracetamol is not strong enough, they should contact their dentist for advice on what painkiller would be best. The student explains not to take aspirin as it is a blood thinner but does not explain why this is relevant post extraction.

I observe the student explain to the patient how vital it is not to smoke, drink alcohol or exercise to prevent infection, but they did not mention to avoid hot drinks for 24 hours.

I observe the student explain why not to spit or use mouthwash for 24 hours and that doing this may result in movement of the blood clot.

I observe the student explain that after the 24 hours the patient is required to use warm water and salt mouth rinse after every meal for one week to prevent infection. The student explains this clearly.

I observe the student explain that if bleeding were to occur, the patient should bite down on a piece of gauze until the bleeding has stopped. The student asks if the patient has any questions, which the patient does not. The student gives the patient an emergency contact number if the bleeding does not stop and directs them to their dentist if they have any questions after they leave.

Station 5: local decontamination unit (LDU) zoning flow

(9 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 10 minutes to complete the observation
- you have **one** attempt at this observation

Observation description

You are required to demonstrate the instrument flow process in the local decontamination unit (LDU) using the Health Technical Memorandum (HTM) 01-05 best practice guidelines for the below:

- using a washer disinfector (not manual/ultra-sonic bath)
- using the autoclave

Equipment

You have been provided with the following equipment:

- PPE: mask, apron, visor/goggles and heavy-duty gloves, latex free gloves
- hand washing sink (tubs in place of sinks)
- instrument washing sink
- instrument rinsing sink
- scrubbing brush
- washer disinfector (tub in place of washer)
- illuminated magnifier for inspection
- autoclave (tub in place of autoclave)
- sterile bag
- label date gun
- Health Technical Memorandum (HTM) 01-05 best practice guidelines for reference

Student evidence

I observe the student correctly don the PPE in order: apron, mask, visor and heavy-duty gloves.

I observe the student take the instrument and remove any visible debris in the correctly labelled sink, using a manual scrubbing brush with warm water.

I observe the student move correctly to the next labelled sink to wash off any extra debris with cold water.

I observe the student use the illuminated magnifier glass to inspect the instrument to make sure it is safe to go into the washer disinfectant.

I observe the student then place the dirty instrument into the washer disinfectant, the student then removes their heavy-duty gloves and replaces with normal PPE gloves ready for the instruments to be taken out of the washer disinfectant. The student does not inspect their apron for any visible debris.

I observe the student remove the instruments from the washer disinfectant and inspect them again under the illuminated magnifier glass.

I observe the student place the instrument into a non-bagged autoclave and remove PPE in correct order: gloves (not touching outside of gloves), apron, mask, eyewear.

I observe the student re-apply PPE and remove the sterile instruments from the non-bagged autoclave and place into a sterile bag and label.

Station 6: zinc polycarboxylate mix

(6 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 10 minutes to complete the observation
- you have **one** attempt at this observation

Observation description

You are required to mix zinc polycarboxylate as a luting cement to cement a crown (thin creamy mix).

You must also select and wear appropriate PPE prior to mixing the material.

Equipment

You have been provided with the following equipment and materials:

- PPE: gloves, apron, mask, visor
- glass slab
- stainless steel spatula
- zinc oxide powder
- polyacrylic acid liquid
- manufacture measuring spoon (1 scoop powdered, 2 drop liquid)
- orange clinical bag
- disinfectant wipes

Student evidence

I observed the student place the PPE on in the correct order: hand hygiene, gown placed, mask placed, eye protection, and then gloves.

I observed the student check then place the correct ratio of cement to liquid on the glass slab with the spatula.

I observed the student mix the material to the correct consistency and demonstrate this by letting the material slide off the spatula to show a thin, creamy consistency.

The student then wipes the spatula and the glass slab.

I observed the student remove the PPE in the correct order and place into the orange bag, removing the gown and the gloves, performing hand hygiene, and then removing eye protection and the mask.

Station 7: clinical and non-clinical waste

(9 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 5 minutes to complete the observation
- you have **one** attempt at this observation

Observation description

You are required to correctly dispose of each waste item into the correct waste bin or sharp box.

You must also:

- select and wear appropriate PPE to complete this observation
- demonstrate the correct handwashing techniques upon completion

Equipment

You have been provided with the following equipment:

- sink and running water
- anti-bacterial soap
- a timer (for students and examiner to track time)
- towels
- foot pedal for bin
- non-clinical bin with non-clinical black bin bag
- clinical bin and clinical orange bin bag
- yellow sharps box
- rigid leak proof container
- amalgam waste pot
- local aesthetic (LA) cartridges
- suture (in packet)
- PPE: gloves, apron, mask
- surgery wipes
- suction filter
- disposable patient cup
- finished soap bottle

- empty glove box
- plastic water bottle

Student evidence

I observe the student don the correct PPE in order, apron, mask, and gloves.

I observe the student dispose of all sharps safely and into the correct sharps bin provided including LA cartridges and suture in packet.

I observe the student dispose of all non-clinical waste correctly into the black bin bag without hesitating, this includes an empty glove box, plastic water bottle, and a finished soap bottle.

I observe the student dispose of all clinical waste correctly without hesitation into the orange bin bag, including gloves, masks, apron, surgical wipes, suction filter, disposable patient cup.

I observe the student apply safe disposal to all given objects that had an assigned bin/box and follow health and safety legislations.

I observe the student perform a full clinical handwash using the anti-bacterial soap:

- turn on tap using elbow
- wet both hands under running water
- apply antibacterial soap to hands
- rub palm to palm in a circular motion
- rub back of each hand with palm and interlaced fingers on each hand
- rub palm to palm with interlaced fingers
- rub with back of fingers to opposing palms with fingers interlocked
- rub each thumb with opposite hand in rotation movement each side
- rub fingertips on the opposite palm in circular motion
- student forgot to rub each wrist with opposite hand
- rinse hands with water
- dry thoroughly with an individual use towel

I then observe the student use the foot pedal to open the bin, but the student does not use their elbow to turn off the running water, they turn the tap off with their hand.

Station 8: dietary advice

(12 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 10 minutes to complete the observation
- your internal provider assessor will play the part of the parent
- you have **one** attempt at this observation

Observation description

A child aged 8 years old is in for a routine dental examination, signs of caries present throughout.

You are to give clear dietary advice to avoid further decay to the child's parent.

You may use the equipment given.

Equipment

- good snacks: apples, bananas, oranges, cheddar cheese cubes, pitta bread, hummus, plain yogurt, carrots sticks
- bad snacks: chocolate bars, sugar/chocolate breakfast cereal, sweets (Haribo), fizzy juice
- hidden sugars: tomato sauce, tinned fruits in liquid, jams, flavoured crisps, flavoured water
- diet tracking sheet

Student evidence

The student explains to the child's parent that it is imperative to support the child with good diet advice and guidance to good oral health.

I observe the student give the adult a diet tracking sheet and explain that it is to be used for tracking what the child is eating and can be helpful to identify any hidden sugars which could lead to dental cavities. The student uses language which is easy to follow and has a clear and friendly manner.

I observe the student discuss the idea of hidden sugars and how this has an impact on the child's oral health. The student then elaborates on the avoidance of cariogenic (sugar) snacks and carbonated drinks and demonstrates using the objects given on the equipment table (such as the chocolate bar, fruit shoot, flavoured water). Carrying on from this, the student explains to the parent that healthy snacks that do not contain many sugars; the student uses the objects given from the equipment table: apples, cheddar cheese cubes, pitta bread, hummus. The student does not use all objects supplied when talking through good and bad snacks.

I observe the student explain the pH levels. They explain that snacks should be kept to mealtimes to keep the PH level neutralised, when food is in the mouth it changes the pH levels and when they are changed the teeth become under attack from decay.

Station 9: charting using Palmer notation

(6 marks)

Student instructions

- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 5 minutes to complete the observation
- you have **one** attempt at this observation

You will be given an opportunity to listen to the voice recording for 30 seconds to make sure volume and equaliser are satisfactory before commencing on the charting questions.

Observation description

You are required to listen to a voice recording and complete charting using Palmer notation.

You will be provided with earphones linked up to a good quality recording via a laptop/mobile phone.

There are 2 rounds, each round is 2 minutes with a 1 minute break in between:

- the outside box is for treatment that needs to be carried out
- the inside boxes are dental work that has been completed

You will be given an opportunity to listen to the voice recording for 30 seconds to make sure volume and equaliser are satisfactory before commencing on the charting questions.

Equipment

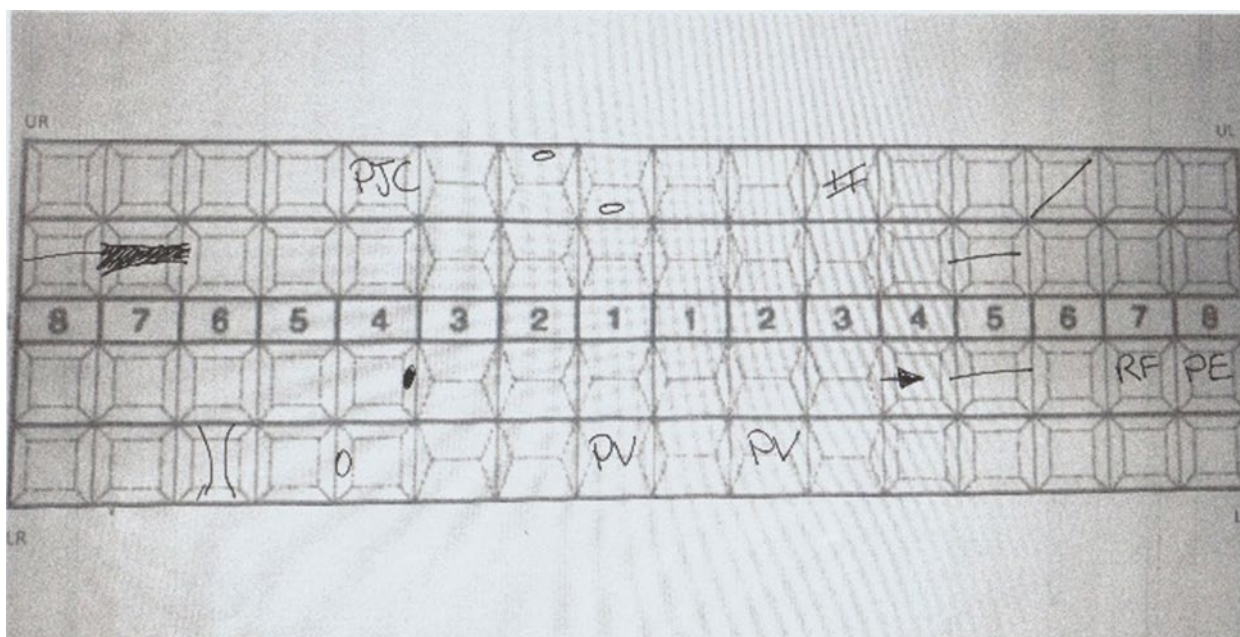
- blank charting sheets
- suitable fine pen
- earphones
- mobile/laptop

Student evidence

I observe the student place headphones on and can hear the recording of the charting.

I observe the student start to chart as soon as the recording begins.

I observe the student choosing the correct grinds for previous treatment in patient's mouth and for treatment that is required to be carried out.



I observed the student carry out the manual charting on the correct teeth that coincide with the recording.

During the second recording of the charting, I observe the student has missed out 2 of the chartings.

15. Lower right first premolar has a mesial restoration and a separate distal cavity.

17. Lower right second molar has a distal occlusal temporary dressing.

I observe the student finish in the time scale given.

Station 10: medical history update

(6 marks)

Student instructions

- you have been provided with a simulated patient for this observation
- you have 5 minutes to read the observation description, instructions and equipment list before starting the observation
- you have a further 5 minutes to complete the observation
- you have **one** attempt at this observation

Observation description

An elderly patient is required to update their medical history form but has forgotten their glasses.

You must assist the patient in updating their details.

Patient has brought an updated list of medication to help fill out their medical history (MH) form.

Equipment

- simulated patient
- standard medical history form
- pen
- lockable filing cabinet

Student evidence

I observe the student greet the patient and ask how they are, the student offers to help the patient in a caring yet professional manner. I observe the student ask the patient if they would like to sit, which they do.

I observe the student inform the patient that their information will be kept private and confidential and then fill out the medical history form with patient filling in all the information (clinical history, including medical, social and dental history).

The student also asks for the medical list that the patient has brought to the appointment. All medicine is written in the correct section and the student checks the spelling of all medication given.

The student places the medical history form in the filing cabinet and then locks the filing cabinet.

Examiner commentary

The student has been given a borderline distinction because throughout the examination the student has demonstrated excellent practice techniques in most aspects of the OSCEs.

The student demonstrated that they were able to gather accurate evidence, contributing to, following, and recording information in records relevant to tasks maintaining confidentiality.

The student has demonstrated an excellent range of knowledge of cleanliness and decontamination by meeting the health and safety regulations and GDC standards.

The student has shown that they are more than competent when dealing with patients in a patient-centred profession.

However, the student demonstrated a few areas where improvement could be applied.

For example, in station 7, the student demonstrated an excellent approach to the handwashing, however, the student turned the tap off with their hand instead of their elbow to stop cross contamination.

In station 8, the student could have used all the objects supplied at the station for a more detailed expatiation.

Although, there were a few areas picked out for improvement, the student showed excellent skills throughout and has shown energy and enthusiasm to develop and take all learnt skills into day-to-day practice in a safe and professional manner.

Overall grade descriptors

The performance outcomes form the basis of the overall grading descriptors for pass and distinction grades.

These grading descriptors have been developed to reflect the appropriate level of demand for students of other level 3 qualifications, the threshold competence requirements of the role and have been validated with employers within the sector to describe achievement appropriate to the role.

Grade	Demonstration of attainment
Pass	<p>A pass grade student can:</p> <ul style="list-style-type: none"> • carry out a range of dental procedures to support dental professionals at chairside, by demonstrating adequate knowledge and skill of: <ul style="list-style-type: none"> ○ current legislation regulations to maintain a safe working environment ○ infection control in relation to health technical memorandum (HTM) 01-07 and hand hygiene ○ instruments and equipment used in a dental surgery including correct storage in relation to HTM 01-05 ○ anatomy and physiology ○ dental treatments ○ duty of care to patients in relation to GDC Scope of Practice • provide factual information and up-to-date advice to help patients to maintain and improve their oral health by demonstrating adequate knowledge and skill of: <ul style="list-style-type: none"> ○ oral disease causes and preventions - provide patients with basic diet advice, as well as demonstrating the correct techniques for toothbrushing and interdental aids ○ the role of dental professionals and the healthcare team in respect of patient management (for example, checking the patient understands the treatment plan and ensure further appointments are appropriately booked if required) • accurately record patients' dental information to contribute to their treatment and dental care on dental charts, using technology where appropriate, by demonstrating adequate knowledge and skill of: <ul style="list-style-type: none"> ○ the principles of dental charting and soft tissue assessment including: <ul style="list-style-type: none"> ▪ federation dentaire internationale (FDI) ▪ Palmer notation ▪ basic periodontal examination (BPE) ▪ periodontal charting ○ the use of information technology and electronic systems within a dental setting • prepare, mix and handle filling and impression material in an appropriate and timely way by demonstrating adequate knowledge and skill of: <ul style="list-style-type: none"> ○ filling and impression materials ○ ensuring there is ventilation

	<ul style="list-style-type: none"> ○ adjusting room temperature accordingly ○ mixing equal amounts of materials, if required <p>Students should demonstrate content covered in all bullet points where applicable to be awarded pass.</p>
Distinction	<p>A distinction grade student can:</p> <ul style="list-style-type: none"> ● carry out a range of dental procedures to support dental professionals at chairside by demonstrating exceptional knowledge and skills of: <ul style="list-style-type: none"> ○ current legislation regulations to maintain a safe working environment and the purpose of regular training and enhanced continuing professional development ECPD ○ infection control in relation to HTM 01-07 and hand hygiene including social, clinical and aseptic ○ instruments and equipment used in a dental surgery, including correct storage in relation to HTM 01-05 and the purpose of audits ○ anatomy and physiology ○ dental treatments and their respective referral process, if necessary ○ duty of care to patients in relation to GDC scope of practice, GDPR, Equality Act 2010 and safeguarding ● provide factual information and up-to-date advice to help patients to maintain and improve their oral health by demonstrating exceptional knowledge and skills of: <ul style="list-style-type: none"> ○ oral disease causes and preventions ● provide patients with: <ul style="list-style-type: none"> ○ basic diet advice ○ demonstration of the correct techniques for toothbrushing and interdental aids ○ potential health risks ○ local health initiatives that will help to maintain and improve oral health (for example, smoking cessation services) ○ the role of dental professionals and the healthcare team in respect of patient management, including patients who have determinants of health inequalities in the UK and internationally that support oral health planning and improvement ● accurately record patients' dental information to contribute to their treatment and dental care on dental charts, using technology where appropriate, by demonstrating exceptional knowledge and skills of: <ul style="list-style-type: none"> ○ principles of dental charting, and soft tissue assessment including: <ul style="list-style-type: none"> ▪ FDI ▪ Palmer notation ▪ BPE ▪ periodontal charting ▪ use of information technology and electronic systems within a dental setting

- effective and contemporaneous note-taking
- good use of time management
- prepare, mix and handle filling and impression material in an appropriate and timely way by demonstrating exceptional knowledge and skills of:
 - filling and impression materials
 - ensuring there is ventilation
 - adjusting room temperature accordingly
 - adjusting the lighting accordingly
 - mixing equal amounts of materials, if required
 - communicating with the dentist as well, as observing their actions, to determine when to prepare materials

Students should demonstrate content covered in all bullet points where applicable to be awarded a distinction.

Document information

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Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of Issue
v1.0	Post approval, updated for publication.		April 2023