
Unit Specification

UHB217 – Colour and lighten hair

Unit reference number: L/617/1718

Level: 2

Guided Learning (GL) hours: 124

Overview

The aim of this unit is to develop learner's knowledge, understanding and skills to be able to change the hair colour using temporary, semi-permanent, quasi-permanent, permanent and lightening products. They will learn the ability to colour a full head, regrowth and the creation of highlight and lowlight effects. Additionally, learners will also learn the ability to take into account a variety of factors and any contra-indications as required.

Learners will need to maintain health, safety and hygiene salon procedures throughout the unit. Additionally, learners must maintain their personal appearance and demonstrate effective communication and consultation skills.

Learning outcomes

On completion of this unit, learners will:

LO1 Be able to colour and lighten hair

LO2 Know how health and safety policies and procedures affect colouring and lightening services

LO3 Understand the factors that may influence colouring and lightening services

LO4 Understand the science of colouring and lightening hair

LO5 Understand the tools, equipment, products and techniques used for colouring and lightening services

Unit content

LO1 Be able to colour and lighten hair

Prepare for colouring and lightening services

Taught content to include

- Preparation of learners should include:
 - Clean and hygienic appearance e.g. avoidance of overpowering odours (heavy perfume/aftershave)
 - Good communication and listening skills
 - Correct own posture with weight evenly balanced
- Preparation of the working area to include:
 - Chair and work area to be clean before the client arrives
 - Chair is positioned correctly including height
 - Adequate work area to allow safe use of electrical equipment e.g. if using accelerator for processing colour
 - Products on display to be clean of dust and hair
 - Tools and equipment to be clean and sterilised
 - Electrical equipment to be visually checked before use e.g. for centres within the United Kingdom portable appliance testing (PAT) may be required when using electrical equipment
 - All tools and equipment to be positioned for ease of use
- Preparation of the client to include:
 - Clean protective garments for the client
 - Visual checks of client's scalp for signs of cuts, sores, abrasions or infections; check the hair for infestations and suitability of service
 - Removal of obstructive jewellery
 - Check of the client record card (where appropriate) for previous services and client history
 - Check all tests have been undertaken

Apply safe and hygienic methods of working throughout services

Taught content to include

- Ensure learner maintains good posture throughout the service
- Working safely throughout the service to minimise risk, harm or injury to self or others
- Ensuring the client maintains the correct posture and is comfortable throughout the service to avoid a hazard or a risk e.g. when applying colour or lightening products the client may be required to tilt the head forwards or backwards for certain areas
- Safely mix and apply and follow manufacturers' instructions when using colour and lightening products
- Ensure relevant tests are conducted where appropriate
- Ensure correct personal protection equipment (PPE) garments are used
- Ensure client has correct personal protective garments
- Minimise the risk of damage to tools and equipment
- Ensure that materials are disposed of hygienically and appropriately
- Ensure there is sufficient stock, which is used appropriately to minimise the wastage of products
- Ensure resources are clean and all hygienic precautions are followed to minimise the risk of cross-infection
- Make effective use of their working time
- Minimise the risk of harm or injury to themselves and others when using colour and lightening products and electrical equipment

Consult with clients about services and outcomes of tests

Taught content to include

- Undertaking appropriate tests and recording outcomes to include:
 - Skin/sensitivity test
 - Elasticity test
 - Porosity test
 - Incompatibility test
 - Test cutting/colour test
 - Development test
- Assess the hair conditions for contra-indications and suitability for colour and/or lightening services to include:
 - Hair classification
 - Hair characteristics
 - Hair elasticity, porosity, texture, density, condition, growth patterns and hair length
- Assess the scalp condition to check for contra-indications and the suitability of the colouring and/or lightening service to include:
 - Cuts, sores and abrasions
- Consulting and confirming with the client prior to the service to agree the chosen style, desired look and finished colour and/or lightening effect
- Explaining each stage of the colouring and/or lightening service to the client
- Agreeing colouring and/or lightening products, process and possible equipment to be used
- Checking throughout the service to meet the client's needs
- Use visual aids where appropriate e.g. colour swatches placed in the hair to show the client the possible effect

Confirm with clients the desired effect

Taught content to include

- Discussing the client's needs and requirements
- Discussing limitations or adaptations that may be required
- The importance of informing the client of the likely cost, duration and expected outcome of the service

Select suitable products, tools and equipment

Taught content to include

- Products:
 - Preparing products in advance e.g. colouring or lightening products and hydrogen peroxide
 - Preparing materials required
 - Barrier cream (where required)
- Tools:
 - Personal protective equipment (PPE) to include protective garments e.g. tinting cape for client and towels, gloves and apron for learner
 - Combs, sectioning clips, tint bowl, sponge (if required) and tint brush
 - Spatula (where required)
 - Plastics cap/highlighting cap
- Equipment:
 - Weighing scales or measuring jug
 - Timer
 - Electrical equipment required

Carry out colouring and lightening services

Taught content to include

- Consult with the client to confirm the look agreed at consultation prior to and during service
- Ensure the client is positioned correctly and at the right height
- Ensure own posture is correct for the service e.g. weight evenly balanced
- Controlling the hair to ensure even distribution of colour and/or lightening product during application and minimise client discomfort
- Ensuring the colour and/or lightening product applied is not overlapping when applying to root area for quasi-permanent and permanent colour and/or lightening application
- Temporary colour application
- Semi-permanent colour application
- Full head quasi-permanent colour application
- Full head permanent colour application
- Full head woven highlights and/or lowlights application
- Pulled through highlights and/or lowlights application
- Toner application
- Apply appropriate sectioning to the hair for the colouring and/or lightening service
- Apply appropriate techniques for the colour and/or lightening service e.g. colour refreshing application techniques on the mid-lengths and ends

Provide clients with advice and recommendations on the service(s) provided

Taught content to include

- Explain the products that may be used by clients including the benefits and effects to maintain the colour e.g. shampoos and conditioners
- Provide aftercare advice including potential costs of further services or products
- Cost of upkeep
- Discussing client's needs and requirements for future services
- Avoidance of excessive sun exposure
- Avoidance of excessive heated styling equipment
- Advice for protection of hair for clients when swimming
- Other services, offers or promotions

LO2 Know how health and safety policies and procedures affect colouring and lightening services

The responsibilities for health and safety in own role

Taught content to include

- Relevant legislation for consultation, client care, confidentiality and consumer/retail, for the country the qualification is taken, which includes: General Data Protection Regulation (GDPR), consumer rights, health and safety, equality. Health and safety regulations for the country where the qualification is taken, examples within the United Kingdom would include:
 - The Health and Safety at Work act
 - The Management of Health and Safety at Work Regulations
 - Provision and Use of Work Equipment Regulations
 - Personal Protective Equipment at Work Regulations
 - Electricity at Work Regulations
 - Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR)
 - The Consumer Protection Act
 - The Trade Descriptions Act
 - Control of Substances Hazardous to Health Regulations (COSHH)
 - Salon insurance requirements, employers liability, public liability, professional indemnity
- Responsibilities for health and safety to include:
 - The reasons why all staff working in the salon have a responsibility for the health and safety of themselves and others
 - The salon safety regulations to ensure their actions do not put others at risk, which includes all staff, clients and visitors
- Additional factors will include:
 - The reasons why it is important to accurately describe the features and benefits of products and services
 - The reasons and importance for gaining client consent
 - The maintenance of the salon environment including:
 - The comfort of the salon
 - Cleanliness of the salon to prevent cross infections via direct or indirect contact
 - Provisions and use of workplace equipment – using only products, tools and equipment trained to use
 - Reasons for personal protective equipment (PPE) e.g. using protective gloves to prevent contact dermatitis when using certain products
 - Making visual checks on all electrical equipment and reporting faults/isolating power
 - Ensuring manufacturers' instructions are always followed when using products and equipment
 - Responsibilities of reporting certain work-related incidents or accidents, diseases and dangerous occurrences to a senior staff member as applicable to the country the qualification is being delivered in
 - Ensuring the public are protected from the manufacture of supplied unsafe goods or misleading price indications as applicable to the country the qualification is being delivered in
 - Prevent a false trade description to any goods that are supplied or offered to supply any goods to which a false trade description has been applied, or false statement

about the provision of any service as applicable to the country the qualification is being delivered in

- Ensure that all personal client data records remain safe and confidential
- Update client records following service
- Hazards associated when colouring and/or lightening hair
- Risks associated to colouring and/or lightening hair
- Safety when using associated products, tools and equipment
- Reasons to undertake appropriate tests both on the client and the hair
- Recognising contra-indications to colouring and/or lightening services
- The legalities of providing a chemical colouring and/or lightening service to minors (as applicable to the country the qualification is being delivered in)

The potential hazards and possible risks that may occur in the workplace and affect services

Taught content to include

- The importance of ensuring that all chemicals related to colouring and lightening services are stored, handled and used in accordance to salon policy, local bylaws and manufacturers' instructions
- The potential hazards and risks associated to not completing appropriate tests on the client and the hair
- Hazards – anything that has the potential to cause harm, e.g. spillage of product on the floor
- Risks – a chance, high or low, that harm caused by the hazard may occur, e.g. potential for self, client or others to slip on the spillage
- Working safely throughout the service, an example may include ensuring there is adequate room around the client with no obstructions
- Ensuring use and maintenance of any equipment is monitored and visual checks are conducted e.g. checking for loose wires and temperature settings on heat accelerators
- Ensuring the client is comfortable and free from harm throughout the service e.g. removing jewellery that may obstruct colour and/or lightening application
- Disposing of waste appropriately to minimise risk of cross-infection and ensure there is no unnecessary risk to the environment, e.g. ensure clean protective garments are freshly laundered for every client
- Correct handling and storage of all products, tools and equipment as applicable to the country the qualification is being taken in
- The importance of ensuring a thorough visual check of the hair and scalp is performed prior to the service to prevent cross infection e.g. ensuring there are no cuts, sores or abrasions on the scalp
- Risk of electric shock when using electrical equipment to enhance the service to include potential hazards of trailing wires
- Fire – the salon's policy in the outcome of a fire and where the assembly point is
- The importance of ensuring personal protective equipment (PPE) requirements are followed for both client and stylist e.g. the use of gloves when applying colour and/or lightening products

The safe and hygienic working methods and practices that must be followed throughout the services

Taught content to include

- Use of clean towels, gowns and protective garments for all clients
- The importance of providing personal protective equipment (PPE) for both client and stylist e.g. prevention of damage to clients clothing
- Use of clean and sterile tools equipment for all clients
- Barrier cream applied to client hairline where required
- Sectioning hair appropriately for the colouring and/or lightening service
- Apply appropriate application techniques for the colour and/or lightening service e.g. colour refreshing application techniques on the mid-lengths and ends
- Control of accelerator/electrical equipment (if used)
- Organisation of working area
- Avoid trailing wires and spillages from products on the floor
- The precautions that must be taken when using bleaching powder and other lighteners

Contact dermatitis and how it can be prevented

Taught content to include

- Recognising contact dermatitis symptoms
- Contact dermatitis – is a rash caused by the skin reacting to a substance it has come into contact with e.g. chemicals. Symptoms can be varied and include:
 - Skin redness
 - Extreme itching
 - Oozing or blisters, may make skin swell
 - Skin that appears darkened or hard/leathery to touch that may become dry or flaky
 - Sensitive to products and sunlight
- How to avoid contracting and preventing measures which may include:
 - Wearing gloves (recommended) when shampooing hair prior to colour and/or lighten hair services
 - Rinsing and drying hands thoroughly
 - Use of moisturisers or barrier creams
- Correct handling and storage of all products, tools and equipment
- Following and adhering to manufacturers' instructions when using products to colour and/or lighten hair services

The importance of questioning clients prior to and during services

Taught content to include

- Understanding the clients requirements and expectations of the chosen colour and/or lightened hairstyle
- The costs related to maintenance of colouring and/or lightening services (if appropriate)
- To ensure the client understands the process
- To provide the client the opportunity to ask questions (where necessary)
- To ensure the client is comfortable
- To gain information on how they maintain their hair, lifestyle and commitment to the colour and/or lightened hairstyle
- To ensure and confirm that the client's expectations are met for the colour and/or lightened finish
- The legal significance of client questioning and the recording of client's responses to questioning
- The importance of informing the client of the likely cost, duration and expected outcome of the service
- The importance of confirming client's satisfaction

The importance of preventing cross-infection and cross-infestation

Taught content to include

- How to avoid cross-contamination, cross-infection or infestation
- Ensuring the clients scalp and hair are checked prior to the colouring and/or lightening service
- Avoidance of cross-contamination e.g. using unclean tools or protective garments from one client could contaminate the next clients' hair or scalp
- Ensure the professional salon image is maintained

LO3 Understand the factors that may influence colouring and lightening services

The factors that may influence services

Taught content to include

- Hair classification

Hair classifications table			
Type 1: Straight hair	1A - Fine/thin	1B - Medium	1C - Coarse
	Straight	Straight with volume	Straight difficult hair
Type 2: Wavy hair	2A - Fine/thin	2B - Medium	2C - Coarse
	'S' pattern	Frizzy 'S' pattern	Very frizzy 'S' pattern
Type 3: Curly hair	3A - Fine/thin	3B - Medium	3C - Coarse
	Soft curl	Loose curl	Tight curl
Type 4: Very curly hair	4A - Fine/thin	4B - Medium	4C - Coarse
	Tight coiled curl pattern	'Z' pattern and spring curl	Tight 'Z' pattern

- Density – this is defined as the number of hairs on the scalp and will affect the tools, techniques and products used and the time of the service
- Texture – the circumference of an individual strand of hair. Hair can be fine, medium or coarse. Coarse hair has the largest circumference, and fine hair the smallest
- The factors that must be taken into account to judge where the application of colour/or lightening products are required
- Porosity – this relates to the condition of the cuticle. Porosity levels are caused by both chemical and physical damage. Cuticles which are raised and feel rough and may tangle easily
- Elasticity – this relates to the condition of the cortex layer of the hair. Elasticity levels are affected by how the hair is treated and its general condition. Hair should stretch and return to its normal size, this indicates the hair is in good condition hair and no damage to the cortex. If hair stretches and snaps or does not return to its original length this indicates internal damage to the cortex
- Growth patterns – this relates to the direction the hair grows from the scalp
- Head and face shape and size – this relates to the overall shape and size of the client's head and includes any specific features
- Skin tone – needs to be considered when choosing colours and/or lightening products
- Lifestyle – this is about the client's everyday activities and working patterns
- Hair length – this will affect the general condition of the hair
- The current style hair or haircut e.g. adaptations may be required to achieve the client expectations
- Temperature and humidity of salon – will affect the hair's ability to process and the development time
- Existing/artificial hair colour – this can impact on the client's desired result, selection of and application of the product may vary according to the existing hair colour
- Percentage of white hair – this can cause a resistance to colour, and become very difficult to cover
- Test results – these may affect the planning of the colour and/or lightening service, these test results will enable learners to establish what is possible to achieve with the planned colour and/or lightening service

- Strength of hydrogen peroxide – this determines the degree of depth of colour and/or lightening that is required
- Time interval from last chemical service – recorded prior if existing client, questioned to discover the information if new client
- Recent removal of hair extensions/previous services – this should be considered as fallen hair can occur after hair extension removal, and the scalp and hair could be sensitised after this service, e.g. check for small patches of baldness
- Use of electrical equipment /accelerators – these can speed up the development of colouring and lightening product

The ways of dealing with any influencing factors

Taught content to include

- How these may influence the colouring and/or lightening services to include:
 - Density – coarse, tight curly hair will require more products than a fine head of hair
 - Texture – may affect the porosity of the hair and the amount of product required
 - Porosity – porous hair will absorb products more easily e.g. over porous requires a considered application to ensure an even result
 - Elasticity – poor elasticity may limit the colouring and/or lightening service, requiring advice on improving the condition of the hair
 - Growth patterns – may influence the application techniques used for colouring and/or lightening
 - Head and face shape and size – colour and/or lightening products choice and placement may be influenced by face shape
 - Skin tone – colour and/or lightening products choice and placement may be influenced by skin tone e.g. darker colour application may not be suitable for very light skin tones
 - Lifestyle – the need to ensure the client is advised regarding return visits and costs required for maintenance
 - Hair length – the length of hair may affect the duration of the service time and the amount of products required when colouring and/or lightening the hair
 - The current style hair or haircut e.g. adaptations may be required to achieve the client expectations
 - Temperature and humidity of salon – if the salon is cold then it may require a longer time for colour and/or lightener to develop
 - Existing/artificial hair colour – as an example, an incompatibility test should be carried out prior to service appointment to establish what the existing hair colour is where there is doubt
 - Percentage of white hair – for example the more white hair on the head usually the lower the volume or percentage of peroxide should be used in order to cover it thoroughly. Check manufacturers' instruction for best results
 - Test results – these should be recorded and are available whenever colour and/or lightening services are undertaken
 - Strength of hydrogen peroxide – the use of correct strength hydrogen peroxide in accordance with manufacturers' instructions
 - Time interval from last chemical service – other chemical services may have an impact on colouring and/or lightening services, or influence the product used e.g. use of semi-permanent colour to refresh a faded permanent colour
 - Recent removal of hair extensions/previous services – the application of permanent colour and/or lightening products may not be suitable for a sensitised scalp
 - Use of electrical equipment /accelerators – use only according to manufacturers' instructions

LO4 Understand the science of colouring and lightening hair

Contra-indications and how they affect colouring and lightening services

Taught content to include

- The importance of undertaking a full consultation
- The importance of recognising any contra-indications to colouring and/or lightening services that may affect the end result e.g. over stretched very porous hair
- The importance of recognising any contra-indications to colouring and/or lightening services that may affect the scalp e.g. adverse skin conditions, scalp irritation, cut or sores
- Contra-indications to colouring and/or lightening services to include, bacterial, viral or fungal infections
 - Bacterial infection examples include:
 - Impetigo – begins as blisters that itch, then fill with a yellowish-brown fluid, that once rupture becomes a flat crust
 - Folliculitis – infection of the hair follicle, causes bumps with pus. May be painful, itchy, sore or swollen
 - Viral infection examples include:
 - Herpes simplex, a raised red blister full of fluid. It will usually be painful and tender to the touch
 - Warts, small, fleshy, grainy bumps usually flesh-coloured, white, pink or tan. Rough to the touch and can be sprinkled with black pinpoint, which are small, clotted blood vessels
 - Fungal infection examples include:
 - Ringworm – depends where it appears but may be red, itchy, scaly, or raised patches that develop blisters or begin to ooze. Patches that may be redder on the outside edges creating a 'ring' effect
 - Infestation/parasites examples include:
 - Head lice – are tiny grey/brown insects. Head lice cling to hairs but stay close to the scalp which they feed off. Head lice lay eggs which hatch after 7 to 10 days. It takes about 7 to 10 days for a newly hatched louse to grow into an adult and start to lay eggs known as nits. Nits are the empty yellow-white eggshells which are left when the lice hatch. Nits look like dandruff but stick strongly to hair
 - Scabies – itchy skin condition causing a rash which may cause tiny blisters or sores where mites have burrowed into the skin
- Hair defects, contra-indication examples include:
 - Trichorrhexis nodosa – hair which breaks easily. Symptoms can include patches of hair loss or extremely short hair that appears not to grow. The hair shaft has thickened or thinned areas or has excessively split ends with discolouration
 - Monilethrix – is a condition that affects hair growth. Its most characteristic feature is that individual strands of hair have a beaded appearance that results in short, fragile and broken hair
- The course of action to be taken if contra-indications are suspected to include:
 - The limits and boundaries of duties
 - Not to offer diagnosis
 - Which conditions need reporting and when
 - Who to report to and where to record the findings
 - Referral for medical attention or advice
- History of previous allergic reaction

The importance of tests to the hair and scalp prior to and during colouring and lightening

Taught content to include

- To understand the reasons why tests are carried out
- The importance of following manufacturers' instructions for skin/sensitivity tests and the potential consequences of failing to carry out these tests
- To ensure that all tests are collated, dated and are stored and recorded for future reference
- To ensure there is a history of all test results
- To ensure that the records have full and accurate information including additional comments relating to the tests
- To prevent possible legal action
- To ensure the colour and/or lightening service finished results are as expected
- To ensure the colour and/or lightening service finished results meet the client requirements

When and how colouring and lightening tests are carried out

Taught content to include

- Skin/sensitivity test – a positive reaction would prevent the colour and/or lightening service. Refer always to the manufacturers' instructions for skin/sensitivity testing requirements, as an example guide:
 - Clean a small area of skin behind the ear
 - Refer always to manufacturers' instructions, as an example:
 - Mix together a small amount of dark tint with a few drop of hydrogen peroxide
 - Apply a small amount of tint on cleaned area behind the ear and allow to dry
 - Advise client to leave on for 24-48 hours unless there is irritation, in which case the client should wash it off immediately. Symptoms of a positive reaction would be redness, itching, soreness, swelling or inflammation
- Elasticity test – may prevent or restrict application of colour and/or lightening products if the hair is stretched and does not go back to its original state
 - On wet hair, take individuals strand of hair from 3-4 areas of the head – if hair is dry then dampen thoroughly
 - Hold one single hair securely and pull it – if the hair stretches and return to its original length without breaking – it has normal elasticity. If hair breaks or fails to return to its original length it has low or no elasticity
- Porosity test – the hair's ability to retain moisture. Where hair is porous it may prevent or restrict the colouring and/or lightening service. Porous hair tends to process chemical reactions quickly and can therefore over-process easily. Additional advice to client may include hair treatments, restyle or cut
 - To determine the external strength of cuticle – take a few strands of hair slide down towards the scalp using one finger and one thumb
 - The more resistance felt, the more porous the hair
- Incompatibility test – to check for the presence of metallic salts in the hair. If present, it will result in the hair becoming discoloured or dissolving and result in a positive reaction. This will prevent the colour and/or lightening services
 - Take a cutting from the hair, secure with cotton or adhesive tape. Pour 20mls of liquid 6% hydrogen peroxide into a non-metallic bowl. Add 5 drops of ammonium hydroxide. Leave for up to 30 minutes. If there are no compatible substances on the hair there should be no reaction in the bowl. Where metallic salts are present the liquid will react with the hair and it may change colour of disintegrate
- Test Cutting/colour test – undertaken prior to service to check if desired colour or lightening depth is achievable
 - Take a few cuttings from various parts of the head. Secure with cotton or adhesive tape. Mix a small amount of the desired colour(s) with the correct strength of hydrogen peroxide and place the cuttings into the colour
 - Process as per manufacturers' instructions
 - Rinse and remove the colour and assess the results
- Development strand test – during the colour service
 - Follow manufacturers' instructions and during development time – wipe off the colour or lightening product from a few strands of hair to see if the colour result has been achieved

How test results influence colouring and lightening services

Taught content to include

- The importance of ensuring that test results are recorded and stored accurately so that a history of results can be reviewed e.g. test cuttings undertaken to establish different depths of colour for future use
- Skin/sensitivity test – positive and negative reactions e.g. a negative reaction means the service can continue
- Elasticity test – influences the product choice, application and final required result e.g. a poor elasticity outcome may require the application of a semi-permanent or temporary colour with advice on further treatment services to improve the overall condition of the hair
- Porosity test – may restrict or prevent chemical service – application techniques and product choice need to take into account the differences in hair structure and may affect final may result in unevenness of colour and/or lightening finished effect
- Incompatibility test – prevents chemical service. There is a presence of metallic salts in the hair and if chemicals are added it may result in the hair destruction. Alternative colouring services may be permitted – undertake a test cutting to establish suitability
- Test cutting/colour test – to check if final colour is achievable e.g. how the natural pigment within hair affects the choice of colour and colouring products and the possible need to pre-lighten
- Development strand test – to check the processing and timing of the service. If not undertaken this may result in under or over processing of the service. Follow manufacturers' instructions for development times

The effects on the hair structure when colouring and lightening hair

Taught content to include

Colour and Lightening Product Type			
Type	Available	Vol/%	Effects on hair structure and duration
Temporary colours	Setting lotion, mousse, shampoos, mascaras, sprays, glitters	None	<ul style="list-style-type: none"> • Larger molecules coat the hairs cuticle • Only deposits colour and tone • Last for one wash
Semi-permanent colours	Conditioners, lotions, shampoos, gels, moussing agents	None	<ul style="list-style-type: none"> • Smaller molecules are deposited into the hairs cuticle and outer edge of the cortex • Only deposits depth and tone • Lasts 5-12 shampoos depending on manufacturers' instructions
Quasi/demi permanent colours	Thickening liquids, cream, gels, moussing agents	1.9%/2vol 4.5%/12vol	<ul style="list-style-type: none"> • Mixture of smaller and larger molecules • These molecules sits within the hairs structure

			<ul style="list-style-type: none"> • Different sized molecules enter the hairs cortex • Only deposits depth and tone, will not lighten the hair • Lasts usually from 10 shampoos upwards depending on manufacturers' instructions
Permanent colours	Liquid gels, cream, lotion	3%/10 Vol 6%/20 Vol 9%/30 Vol 12%/40 Vol	<ul style="list-style-type: none"> • Smaller molecules enter the hairs cortex becoming trapped as they swell and enlarge • Can lighten hair up to 4 shades • Can darken and add/change and neutralise tone • Permanent – grows out
High-lift colours	Creams, powders, liquid gels	9%/30 Vol 12%/40 Vol	<ul style="list-style-type: none"> • Penetrate the cortex layer • Can lighten up to 5 shades • Can also add, change and neutralise tone • Permanent – grows out
Bleaching Agents	Oils, creams, powder, liquid gels	6%/20 Vol 9%/30 Vol 12%/40 Vol	<ul style="list-style-type: none"> • Lighten artificial and natural colour pigment, open the cuticle and enter the cortex, where they change melanin (natural pigment) to oxymelanin (colourless pigment) • Permanent – grows out
Hydrogen peroxide	Liquid or liquid cream	6%/20 Vol 9%/30 Vol 12%/40 Vol	<ul style="list-style-type: none"> • When mixed with colouring or lightening product produces a chemical reaction

The effects of natural and artificial light on the appearance of hair colour

Taught content to include

- Salon's lighting is important to enable the client to see their colour result accurately
- Natural light is referred to as white light – ideal way to show the hair's true colour
- 'Soft' yellow tone electric bulbs can make the hair look warmer in appearance and neutralise blue or ash tones
- Fluorescent tubes can make the hair appear more ash in tone as they give off a bluish tinge and remove the warmth from the hair

The principles of colour selection

Taught content to include

- Primary colours used in colouring and/or lightening are:
 - Red
 - Yellow
 - Blue
- Secondary colours used in colouring and/or lightening are:
 - Orange
 - Green
 - Violet
- Mixing two primary colour together will produce a secondary colour e.g. yellow and blue makes green
- The effects of natural and artificial light, e.g. artificial light does not contain the full range of all visible colours that make up natural light and can affect the apparent colour of the hair
- The cortex contains all the colour pigments found in the hair
- Pigments are called melanin
- The colour pigments found in the cortex of the hair:
 - Eumelanin are the black and brown colour pigments
 - Pheomelanin are the yellow – red/brown colour pigments
- The depth of colour refers to how light or dark a colour is e.g. medium brown
- The tone of colour refers to the colour shade or hue e.g. medium red brown (mahogany)
- The principles of colour selection
 - ICC (International Colour Chart) is used to identify the depth and tone of natural and artificial hair colour
 - Use of a colour wheel to assess primary and secondary colours and for tone and neutralisation purposes
- The ICC is represented by a numbering system that most manufacturers follow
 - Depths range from black to lightest blonde:

Depth base	Name
10	Lightest blonde
9	Very light blonde
8	Light blonde
7	Medium blonde
6	Dark blonde
5	Light brown
4	Medium blonde
3	Dark brown
2	Darkest brown
1	Black

- When hair is lightened it loses its colour pigments in a certain order – red, orange and then yellow

The effects that temperature has on the colouring and lightening process

Taught content to include

- Temperature – the temperature of the salon can have an effect on the development time e.g. a warm salon may speed up development times
- Application of heat (if used) – may speed up developing time
- Temperature of the head – the heat from the head affects possible development and outcome of colour and/or lightening services e.g. a client that is hot and perspiring profusely at the scalp area may deposit moisture that works against the mixed products, or speeds up the processing time
- The importance of constantly monitoring the development time e.g.:
 - Over development or the risk of breaking and damaging the hair
 - Under development may result in uneven result

LO5 Understand the tools, equipment, products and techniques used for colouring and lightening services

Tools, equipment and products available and their use

Taught content to include

- Tools:
 - Cutting comb – for use with sectioning
 - Pin tail comb – used for picking up precise lines and sections when colouring, e.g. for weaving or slicing hair
 - Sectioning clips – used to section or divide hair, keeps hair in place prior to colouring or lightening
 - Plastic bowl – to mix product
 - Application brushes/sponge applicators – various types – to mix and apply product
- Equipment:
 - Gloves – to protect hands
 - Colour remover lotion/wipes – to remove excess from client hairline
 - Colour key – to ensure all colour is squeezed from working tube
 - Colour rake – freehand technique tool
 - Colour chart – colour selection choice, use as per manufacturers' instructions
 - Gowns – to cover client's clothes
 - Plastic cape – provides a plastic layer to avoid seepage occurring and staining
 - Towels – placed on top of gown to protect the client
 - Electrical accelerator (if used) – for application of heat to speed the development time
 - Steamer (if used) – for application of moist heat to speed the development time
 - Foils/meche/foams – various resources available for various application techniques and end results
 - Highlighting plastics caps, hooks – to pull shorter hair through plastic barriers
 - Whisks – to whisk product and peroxide together more evenly
 - Timers – to ensure precise timings for service
 - Scales – to correctly measure colouring and lightening products
 - Measuring jugs – to measure peroxide amount, and product mixing
- Products – to include application, effects and removal methods:
 - Barrier cream to prevent unnecessary staining around the hairline and ears
 - The importance of following manufacturers' instructions for product selection and application methods
 - The different strengths of hydrogen peroxide and how they influence colouring and lightening services
 - The importance of applying products in a way that minimises the risk of the product being spread to the client's skin, clothes and surrounding area
 - The different strengths of hydrogen peroxide and how they influence colouring and lightening services
 - The factors that must be taken into account to judge the quantity of hair to be woven to achieve a balanced look
 - The importance of sectioning hair accurately when colouring and lightening
 - The importance of applying products in a way that minimises the risk of the product being spread to the client's skin, clothes and surrounding area
 - The potential risks of using colour and lightening products on previously chemically treated hair, will cause overlapping and potentially damage and breakage to the hair – offer other types of services
 - The precautions that must be taken when using bleach powder and other lighteners

- The different types of lighteners and toners available and their uses
- The importance of emulsifying colour prior to removal to prevent staining and maintain customer satisfaction
- The importance of ensuring all colour and/or lightening products once processed are removed from the hair
- The importance to avoid disturbing areas from developed areas to allow all the hair to achieve the desired colour result
- The importance of ensuring the hair is restored to its natural pH balance after a colouring and/or lightening service by applying a pH balanced conditioner. This will include:
 - Return the hair back to normal 4.5–5.5 pH state
 - Add moisture to the hair
 - Stop any further oxidation of the product taking place
 - Close the cuticle

Methods of applying and removing colouring and lightening products

Taught content to include

Product Type	Effects	Method of Application and Removal
Temporary	<ul style="list-style-type: none"> • Good introduction • Refresh fade • Instant fashion effect • Neutralises unwanted tones temporarily • Darken hair • Blends silver tones • No commitment 	<ul style="list-style-type: none"> • Partial head/applied where needed • Shampoo/rinse out in one wash
Semi-Permanent Colour	<ul style="list-style-type: none"> • Refresh permanent colours with faded ends • Add shine and improve condition • May be suitable for clients allergic to other colour products • Fashion/fantasy shades • Less commitment than permanent colouring 	<ul style="list-style-type: none"> • Full head/partial head application • Use applicator, sponge and bowl • Apply to where is required • Washes away typically between 5–10 shampoos depending upon manufacturer's information
Quasi/Demi Permanent	<ul style="list-style-type: none"> • Gentle on the hair • Tone out silver for longer/gentle fade • Not used to lighten only add tone/darken • Tone lightened hair • Low volume/strength peroxides only 	<ul style="list-style-type: none"> • Full head/partial head application • Counteracts unwanted tones more permanently • Fades away over time • Massage to emulsify the colour • Rinse until water runs clear • Shampoo to remove product completely from hair and scalp • Finish with acidic conditioner to restore pH balance

Permanent Colours	<ul style="list-style-type: none"> • 100% white hair coverage • Fashion shades • Lighten, tone and darken hair • Various strength/volume peroxides 	<ul style="list-style-type: none"> • Full head/partial/weaving/freehand techniques • Grows out, very little fade • Massage to emulsify the colour • Rinse until water runs clear • Shampoo to remove product completely from hair and scalp • Finish with acidic conditioner to restore pH balance
Lightening Agents (high-lift tint)	<ul style="list-style-type: none"> • Lighten the hair more gently than bleaching agents • Buffers to stop the process after a set period of time • Can lighten some pre-coloured hair • Up to 5 levels of lightening can be achieved • Fashion tones available • Higher levels of hydrogen peroxide can be used 	<ul style="list-style-type: none"> • Full head/partial head/weaving, freehand techniques • Grows out, very little fade • Shampoo and condition to remove product completely from scalp • Finish with acidic conditioner to restore pH balance
Bleaching products	<ul style="list-style-type: none"> • Lightens the hair using an oxidation process which de colours the melanin/colour pigment in the hair shaft • Higher levels of lightening can be achieved • Various shades of blonde, that can then be toned with alternative product • Removes artificial colour pigment for correctional purposes • Low to high levels of peroxide used to achieve and map speed with results 	<ul style="list-style-type: none"> • Full head/partial head/scalp/weaving/bathing • Grows out, can be prone to darkening/yellowing in atmospheric conditions • Shampoo and condition with warm water to completely remove products • Finish with acidic conditioner to restore pH balance
Vegetable colourants/Henna	<ul style="list-style-type: none"> • Darkens or adds tone to virgin hair • Stain the cuticle and build up in intensity 	<ul style="list-style-type: none"> • Mix with warm/hot water and applied directly to hair, wrapped up with plastic and towel and developed under heat for as long as desired result is achieved • Rinse thoroughly until water runs clear

The importance of following salon and manufacturers' instructions during colouring and lightening services

Taught content to include

- To ensure the colour and/or lightening result is achieved
- The importance of ensuring there is adequate ventilation when mixing powders and bleaches to minimise unnecessary inhalation of product
- To prevent hazards
- To minimise risks
- To produce satisfactory results
- To avoid problems or mistakes
- To avoid legal action

Types and causes of problems that may occur during the services and ways of dealing with them

Taught content to include

Problems	Cause	Solution
Contra-indication found	<ul style="list-style-type: none"> • Not checking scalp and/or hair thoroughly prior to service 	<ul style="list-style-type: none"> • Do not begin the service or, if started, stop service. Encourage client to rebook, provide appropriate advice for treatment or referral for the contra-indication
Scalp irritation	<ul style="list-style-type: none"> • Possible allergic reaction • Peroxide strength too high • Not checking scalp thoroughly prior to service 	<ul style="list-style-type: none"> • Stop immediately and remove with lukewarm water
Uneven result	<ul style="list-style-type: none"> • Incorrect application of product • Porous hair • Wrong product choice 	<ul style="list-style-type: none"> • Spot colour where the hair is patchy only
Poor coverage	<ul style="list-style-type: none"> • Hair resistant • Uneven application • Incorrect choice of product 	<ul style="list-style-type: none"> • Resistant hair – pre-soften the area • Spot colour if applicable over area or use alternative colour product to correct • Choose the correct product
Hair breaking	<ul style="list-style-type: none"> • Hair is in poor condition • Incorrect application/overlapping of product • Incorrect use, or prolonged use of heat • Incorrect strength of peroxide used 	<ul style="list-style-type: none"> • Remove product and apply and restructuring conditioner or apply specific treatment services

Seepage of product	<ul style="list-style-type: none"> • Incorrect application • Incorrect masking of area not to be coloured or lightened • Incorrect use of foils or mesh • Incorrect mixing of product (too runny) 	<ul style="list-style-type: none"> • Weave out patchy areas and apply base colour to match root area, to break up the patchy areas
Over processed result/deterioration of hair condition	<ul style="list-style-type: none"> • Incorrect use of products and hydrogen peroxide • Insufficient hair analysis • Incorrect application 	<ul style="list-style-type: none"> • Apply conditioning treatments to the hair
Colour fade	<ul style="list-style-type: none"> • Incorrect product use • Porous hair • Natural/sunlight fade 	<ul style="list-style-type: none"> • Restore depth and tone if applicable with other products e.g. semi-permanent or quasi colours • Colour refresh on the mid-lengths and ends
Too yellow	<ul style="list-style-type: none"> • Incorrect choice of products and/or hydrogen peroxide • Insufficient hair analysis • Incorrect mixing of products 	<ul style="list-style-type: none"> • Apply a neutralising tone • If hair is in good enough condition reapply bleach then apply toner

- The limits of the learner's authority for resolving colouring and lightening problems – do not advise any colour corrections beyond the level of authority
- Identify the person to whom problems should be reported to

The importance of using products cost effectively

Taught content to include

- Following manufacturer's instructions to ensure correct ratios are used when mixing and using colours and/or lightening products and prevent wastage
- Effects on the environment to include:
 - The mixing of products in a well ventilated area – away from others
 - The safe disposing of unwanted colouring and/or lightening materials
- Following salon and organisation policy when using colouring and/or lightening product

The importance of providing clients with advice and recommendations on the service(s) provided and products available

Taught content to include

- To provide longevity of the colour and/or lightening service
- Time intervals between services/maintenance services
- To help clients maintain colour and condition at home using specific homecare products
- Reputation and walking advertisement for the salon
- Suggesting other services to enhance the colouring or lightening service
- Additional services or retail products to enhance the colouring and/or lightening services e.g. conditioning products

Unit requirements

Learners are required to complete all assessment requirements related to this unit:

1. Service portfolio
2. Theory examination
3. Synoptic practical examination

1. Service portfolio

Learners must produce a service portfolio which is required to be completed under the supervision of a lecturer who must monitor the quality of the services performed throughout the learners' training.

Performance of learning outcome 1 must be demonstrated as part of all technical observations and will be recorded on **at least six observations**. This must be conducted on a range of new and existing clients and include the following colour applications: semi-permanent, full head quasi-permanent, full head permanent, full head highlights and/or lowlights, pulled thorough highlights and/or lowlights and toner application.

The service portfolio must be completed and marked prior to the learner completing the theory examination and the synoptic practical examination.

2. Theory examination

Learners must complete a theory examination for this unit. This will consist of a multiple choice question paper.

The theory examination will test knowledge and understanding from across learning outcomes 2, 3, 4 and 5. Learners should use the unit content sections of this unit to aid revision.

3. Synoptic practical examination

This unit will form part of the synoptic practical examination which will be externally set by the awarding organisation and examined and marked by an external examiner. The synoptic practical examination will take place at the end of the period of learning.

Document History

Version	Issue Date	Changes	Role
v1	01/08/2018	First Published	Qualifications Manager
v2	14/02/2019	Update to ITEC branding as primary colour and logo	Qualifications Administrator