
Unit Specification

iUHB315 – Provide specialist hair and scalp treatments

Unit reference number: J/617/8098

Level: 4

Guided Learning (GL) hours: 97

Overview

The aim of this unit is to develop learners' knowledge and understanding of the important skill of consulting with clients to determine their needs and requirements.

Learners are required to undertake comprehensive hair and scalp analysis to provide clients with information and make suitable recommendations for specialist services and treatments using the appropriate products and techniques. The ability to analyse results and offer further courses of actions based on this information and treatment outcomes is an essential part of this unit.

Learners will need to maintain a high level of health, safety and hygiene throughout the unit.

Additionally, learners must reflect the hairdressing industry in their personal appearance and demonstrate effective communication skills.

Learning outcomes

On completion of this unit, learners will:

LO1 Be able to provide specialist hair and scalp treatments

LO2 Understand how health and safety policies and procedures affect hair and scalp treatments

LO3 Understand the factors that may influence specialist hair and scalp treatments

LO4 Understand the science of specialist hair and scalp treatments

LO5 Understand the tools, equipment, products and techniques used for specialist hair and scalp treatments

Unit content

LO1 Be able to provide specialist hair and scalp treatments

Prepare for specialist hair and scalp treatments

Taught content to include

- Preparation of learners should include:
 - Personal image, ensuring industry standards of dress
 - Clean and hygienic appearance, e.g. avoidance of overpowering odours – tobacco, heavy perfume/aftershave
 - Good communication and listening skills
 - Correct posture with weight evenly balanced
 - Correct personal protective equipment worn
- 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 a steamer for treatment services
 - Products on display to be clean of dust and hair
 - Tools and equipment to be clean and sterilised
 - Disposing of waste hygienically and appropriately
 - 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 the client record card (where appropriate) for previous services and client history
 - Check all appropriate tests have been undertaken prior to and during the hair and scalp treatment service

Apply safe and hygienic methods of working throughout services

Taught content to include

- Ensure there is sufficient stock, which is used appropriately to minimise the wastage of products
- Ensure products, tools and equipment are correctly handled, stored, clean, readily available and all hygienic precautions are followed to minimise the risk of damage or cross-infection
- Cleanse/sterilise tools and equipment
- Work safely throughout the service to minimise risk, harm or injury to self or others
- Ensure stylist maintains good posture throughout the service
- Ensure the client maintains the correct posture and is comfortable throughout the service to avoid a hazard or a risk, e.g. when applying treatment products ensure the clients head is in the correct position to distribute the product evenly to the right area(s)
- Ensure the correct storage and handling of all products, tools and equipment
- Safely mix, apply and follow manufacturers' instructions when using products
- Ensure relevant tests are conducted where appropriate
- Ensure correct own personal protection equipment (PPE) garments are used
- Ensure client has correct personal protective garments
- Ensure that waste is disposed of hygienically and appropriately
- Ensure any spillages from use of products are immediately cleaned up
- Minimise the risk of harm or injury to themselves and others when using products and electrical equipment
- Ensure hygienic working practices throughout the service including own personal hygiene, e.g. eliminating offensive body odour or strong smell of tobacco
- Make effective use of working time

Consult with clients about services and outcomes of tests

Taught content to include

- Undertaking appropriate tests and recording outcomes to include:
 - Skin/sensitivity test – tactile and thermal testing
 - Elasticity test
 - Porosity test
 - Pull test – if required
 - Visual check/analysis of the scalp
- Assess the hair conditions for contra-indications and suitability for hair and scalp treatment to include:
 - Hair classification
 - Hair characteristics
 - Hair elasticity, porosity, texture, density, condition, growth patterns and hair length
- Assess the scalp condition for contra-indications and the suitability of products or if the treatment can go ahead, to include:
 - Cuts, sores and abrasions
- Consulting and confirming with the client before the service/treatment commences to agree the chosen hairstyle requirements
- Explaining each stage of the specialist hair and scalp treatments to the client

- Agreeing products, process and possible equipment to be used
- Checking throughout the service/treatment to meet the client's needs
- Use visual aids where appropriate, e.g. possible further treatments or advice

Confirm with clients the desired effect

Taught content to include

- Discussing 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(s) of the service/treatment

Carry out a suitable questioning process with the client for the service

Taught content to include

- Understanding the clients requirements and expectations of the chosen specialist hair and scalp treatments
- The costs related to maintenance of hair or scalp service/treatment (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 hair and scalp treatment
- To ensure and confirm that the client's expectations are met for the specialised hair and scalp treatment
- The legal significance of client questioning and the recording of client's responses to questioning
- The importance of confirming client's satisfaction

Select suitable products, tools and equipment for specialised hair and scalp treatments

Taught content to include

- Products
 - Preparing products in advance, e.g. specialised shampoos, scalp tonics, specialised hair and/or scalp treatments, conditioners
 - Preparing materials required, e.g. plastic cap
- Tools
 - Personal protective equipment (PPE) to include protective garments, e.g. use of gloves recommended when using shampoos
 - Combs, sectioning clips, bowl, sponges, applicators, tint brush (if required)
- Electrical equipment
 - Vibro massager
 - High frequency (if used)
 - Steamer
 - Accelerator

Carry out specialist hair and scalp treatments

Taught content to include

- Manual scalp massage using:
 - Effleurage, a gentle stroking movement
 - Petrissage, a slow, firm, kneading movement
 - Vibration, fine, gentle trembling movement of the tissues which is performed by the hand or fingers
- Electrical scalp stimulation
 - Vibro massager imitates manual massage movements of tapotement and friction
- High frequency (if used)
 - Uses low-current and high frequency – may improve blood supply to the scalp
- Techniques used in hair and/or scalp treatment will be dependent on:
 - Individual client requirements and the required product form and affected area
 - Use of correct product, e.g. will maximise the benefit and improvement of the hair/scalp condition
 - Correct application including manual scalp massage, vibro scalp massage, scalp steaming, high frequency, application of topical lotions
 - Correct preparation, e.g. at the start of the service in readiness for either wet or dry application of treatment products
- Correct product choice, e.g. products must be appropriate for the agreed individual client's treatment
- Use of appropriate tools for techniques and required application method – use safely and ensure choices are suitable to produce the desired service outcome
- Product is applied thoroughly and systematically to the identified area, e.g. a client having a warm oil treatment will require this to be applied to a dry head
- Use a combination of techniques to achieve the desired outcome, e.g. apply dexterity when using manual massage to aid client comfort
- Apply products effectively to maximise benefit

Different treatable hair and scalp conditions that may be present when providing the service/treatment

Taught content to include

Different hair and scalp conditions	Causes	How to recognise	Possible treatments
Dry scalp/ Sensitised scalp	<ul style="list-style-type: none"> Sensitivity to products, damage due to heat styling 	<ul style="list-style-type: none"> Itchy, white flakes, red patches 	<ul style="list-style-type: none"> Scalp tonics, conditioning treatments
Oily scalp/ Seborrhoea	<ul style="list-style-type: none"> Over production of the sebaceous gland 	<ul style="list-style-type: none"> Excessive oil on the hair and scalp 	<ul style="list-style-type: none"> Scalp tonics
Pityriasis capitis	<ul style="list-style-type: none"> Over production of the epidermal cells 	<ul style="list-style-type: none"> Yellow flakes often with an oily scalp 	<ul style="list-style-type: none"> Medicated shampoo
Chemically damaged hair	<ul style="list-style-type: none"> Frequent chemical services 	<ul style="list-style-type: none"> Dry and porous with cuticle scales open and rough. The cortex may be weak, with poor elasticity 	<ul style="list-style-type: none"> Reconstruction treatments
Environmentally damaged hair	<ul style="list-style-type: none"> Too much exposure to sun, wind, sea water and chlorine can affect the hair's condition by causing colours to fade or cuticle scales to open, resulting in porous hair 	<ul style="list-style-type: none"> Colour faded, dry and porous 	<ul style="list-style-type: none"> Deep conditioning treatments
Heat damaged hair	<ul style="list-style-type: none"> Excessive heat from heated equipment, incorrect use of equipment or failure to use heat protection Products when styling can cause the hair to be porous, leaving the cuticle scales open and poor elasticity in the cortex 	<ul style="list-style-type: none"> Dry and porous and the cuticle scales open and rough. 	<ul style="list-style-type: none"> Deep conditioning treatments

Problems, cause(s) and solutions that may arise when undertaking scalp and hair treatments

Taught content to include

Problem	Cause	Solution
Skin irritation, itchiness, redness or swelling	<ul style="list-style-type: none"> Intolerance or allergy to products 	<ul style="list-style-type: none"> Stop service/treatment Rinse hair/scalp with tepid water Undertake further consultation as to history of allergies to other products, e.g. perfumes
Burns	<ul style="list-style-type: none"> Incorrect use of electrical equipment, e.g. high frequency electrode has been stationary on the scalp 	<ul style="list-style-type: none"> Stop service/treatment apply appropriate first aid to the area Check temperatures of all electrical equipment before use and during service Ensure high frequency electrode is kept moving throughout the treatment
Bruising	<ul style="list-style-type: none"> History of sensitivity; Incorrect massage techniques applied, e.g. over-working one area 	<ul style="list-style-type: none"> Stop service/treatment Incorrect consultation or service advice Ensure techniques applied to areas are suitable for client
Scarring	<ul style="list-style-type: none"> History of accident 	<ul style="list-style-type: none"> Avoid area
Client feels faint, light headed during or post service/treatment	<ul style="list-style-type: none"> Possible over-stimulation of scalp Possible of use of heat 	<ul style="list-style-type: none"> Stop service Apply first aid where necessary/seek medical attention

The appearance of erythema and hyperaemia and when carrying out specialised hair and scalp treatments

Taught content to include

- Erythema – a natural reaction to the skin when normal massage is applied
- Appearance:
 - Redness of the skin
 - Can disappear when light pressure is applied
- Possible causes include:
 - Infection, allergies, sunburn, waxing
 - Action – do not carry out service/treatment
 - Massage, electrical treatment, acne medication, exercise
 - Assess condition/sensitivity before undertaking service/treatment
- Hyperaemia – excessive amount of increased blood flow to different vessels in the body (engorgement). The skin may be swollen, red and warm to touch
- Possible causes may include:
 - Possible illness, excessive exercising
 - Action – do not carry out service, advise client to seek medical advice

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

Taught content to include

- Provide aftercare advice regarding the service including potential costs of further services or products, e.g. suitable shampoo and conditioners which are sulphate free and pH balanced, additionally styling products that may be used by clients including the benefits and effects to maintain the treatment service outcomes, e.g. shampoos and conditioners
- To ensure the client feels valued and that the service/treatment was specifically tailored to their individual needs
- To ensure client expectations can be met and where applicable offer other services, e.g. advising the client on a change of style or haircut may benefit the overall condition of the hair and/or scalp
- To provide advice and guidance on how to ensure the outcome of the service or treatment may affect the hair and/or scalp for a period of time
- When it is advisable to next wash the hair and scalp; likely outcomes or expectations of the hair or scalp condition
- To advise clients how to follow and maintain home care requirements e.g. the use of specific home care products as preventative treatment
- Special precautions, e.g. avoidance of excessive heat or sun exposure or avoidance of excessive use of heated styling equipment to the hair and/or scalp
- The needs and requirements of the client for future services, e.g. guidance timing of when to return to the salon for upkeep of the service/treatment
- Provide aftercare advice including potential costs of further services or products
- Other services, offers or promotions, for example discounts using salon loyalty card
- Reputation and walking advertisement for the salon

LO2 Understand how health and safety policies and procedures affect hair and scalp treatments

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 describe accurately the features and benefits of products and services or treatments
 - 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 fit for purpose
 - Reasons for personal protective equipment (PPE), e.g. using protective gloves to prevent contact dermatitis when using certain products, e.g. shampoo when treating the hair
 - Making visual checks on all electrical equipment and reporting faults/isolating power
 - Ensuring manufacturers' instructions are always followed when using products and equipment, e.g. incorrect use of a steamer may result in products oversaturating the hair
 - Responsibilities of reporting certain work-related incidents or accidents, diseases and dangerous occurrences to a senior staff member

- Ensuring the public are protected from the unsafe goods or misleading price indications
- Prevent a false trade description of any goods that are supplied or offered, or making a false statement about the provision of any service
- Ensure that all personal client data records remain safe and confidential
- Update client records following service
- Hazards associated when treating the hair and scalp, e.g. over-use of products around the hairline
- Risks associated to hair and scalp treatments, e.g. the risk of the product seeping into the client's eyes
- Safety when using associated products, tools and equipment
- Reasons to undertake appropriate tests both on the client and the hair
- Recognising contra-indications to hair and scalp treatments

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 hair and scalp treatments are stored, handled and used in accordance to salon policy, local bylaws and manufacturers' instructions
- The potential hazards and risks associated with not completing appropriate tests on the client and the hair
- Hazards – anything that has the potential to cause harm, e.g. failing to turn off electrical equipment
- Risks – a chance, high or low, that harm caused by the hazard may occur, e.g. potential for self, client or others to burn themselves/electrical shock
- 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 high frequency 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
- The Control of Substances Hazardous to Health (COSHH), including handling and storage of all products, tools and equipment
- 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 event 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 shampooing 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 ensuring the consultation process has included and recorded; any known allergy history, e.g. intolerance to some additives found in shampoos and conditioners
- The importance of providing personal protective equipment (PPE) for both client and stylist e.g. prevention of damage to client's clothing
- Use of clean and sterile tools and equipment for all clients
- Sectioning hair appropriately for the hair and/or scalp treatment to avoid overlapping of products or possible burns or fatigue during massage technique
- Apply appropriate techniques for hair and scalp treatment, e.g. correct massage techniques for service/treatment depending on client consultation outcomes
- Control, safe handling and storage of electrical equipment. High frequency and vibro massage examples include:
 - High frequency
 - Keep high frequency electrodes away from flammable liquids
 - Ensure hand-held electrode has protective cover
 - Always check and test equipment before use, test on self
 - Remove all jewellery from self and client when using electrical massage techniques
 - Avoid sparking
 - Avoid touching metal, e.g. machine casing, trolley, legs of chair
 - Avoid touching the client when applying direct high frequency
 - Check with client for comfort
 - Position equipment and tools safely
 - Vibro massage
 - Always check and test equipment before use, test on self
 - Remove all jewellery from self and client when using electrical massage techniques
 - Position equipment, tools and products safely
 - Check intensity on self before applying to client
 - Check with client for comfort
- Organisation of working area – there should be adequate room to allow the stylist to work safely using the electrical equipment
- Avoid trailing wires and spillages of products onto the floor, e.g. ensure there are no trailing wires when using the high frequency machine
- The precautions that must be taken when using scalp tonics or conditioners, e.g. spirit based tonics may irritate a sensitised massaged scalp

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 when shampooing hair prior to hair and scalp treatment
 - Rinsing and drying hands thoroughly
 - Use of moisturisers or barrier creams
- Following Control of Substances Hazardous to Health (COSHH) regulations when using and storing hair and scalp treatment products
- Following and adhering to manufacturers' instructions when using hair and scalp treatments

LO3 Understand the factors that may influence specialist hair and scalp treatments

The factors that may influence services provided

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

- The factors that must be taken into account to judge where the application of tools, products and equipment for hair and/or scalp treatments are required, to include:
 - 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 – when performing the hair and scalp treatment the amount of product mixed will need to be considered
 - Porosity – this relates to the condition of the cuticle. Porosity levels can be affected by both chemical and physical damage. Cuticles which are raised and feel rough may tangle easily
 - Elasticity – this relates to the condition of the cortex layer of the hair. Elasticity levels are affected by how hair is treated and the condition it is in. Hair should stretch and return to its normal size, this indicates the hair is in good condition with 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. Clients whose hair has poor elasticity may not be suitable for some hair and scalp treatments
 - Hair condition – if it has been chemically or physically affected by chemicals or external elements. This will determine the treatment product and massage technique to use
 - Test results – these impinge on the planning and way forward when undertaking and hair and/or scalp service or treatment, these test results will establish what it is possible to achieve with the planned treatments
 - 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
 - Use of electrical equipment/accelerators – correct equipment chosen for treatment system

The ways of dealing with any influencing factors

Taught content to include

- How these may influence the hair and scalp treatments 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 mid-lengths and ends of the hair require a considered application of products to ensure the roots area is not unduly affected by the service or treatment
 - Elasticity – poor elasticity will require particular treatments to improve the condition of the hair
 - Growth patterns – may influence the application techniques and possible use of high frequency
 - 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 and the amount of product required when treating the hair
 - The current style hair or haircut, e.g. adaptations may be required to achieve the client expectations due to the hair's poor or improved condition

Contra-indications and how they affect hair and scalp treatments

Taught content to include

- Contra-indications to hair and scalp treatments or services to include, bacterial, viral or fungal infections. Contagious conditions to include:
 - Bacterial infection examples:
 - Impetigo – begins as blisters that itch, then fill with a yellowish-brown fluid, that once ruptured becomes a flat crust
 - Folliculitis – infection of the hair follicle, causes bumps with pus. May be painful, itchy, sore or swollen
 - Viral infection examples:
 - 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 pinpoints, which are small, clotted blood vessels
 - Fungal infection examples:
 - Ringworm – depends where it appears but may be red, itchy, scaly, or have 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:
 - 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

- Other possible contra-indications may include:
 - Pregnancy – high frequency should not be used
 - Migraine – massage, high frequency and vibro massage may trigger an attack
 - High blood pressure – overstimulation from hand massage, high frequency and vibro massage can cause dizziness and nausea
 - Epilepsy – high frequency and vibro can trigger an attack and should not be used
- The importance of recognising a contra-indication of the scalp and/or hair
- 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. If a hair defect is suspected the client should be referred for medical attention or advice and the service should not be performed
- History of previous allergic reaction, e.g. products used for the service and/or treatment may contain nut extracts
- Conditions which may be contra-indicated, prevent or restrict the hair and/or scalp treatment or service:
 - Sebaceous cyst – tender or sore raised bump on skin which, if infected or inflamed, will contain pus
 - Psoriasis – common skin condition that changes the life cycle of skin cells. Causes a build-up of skin cells which may appear thick silvery and inflamed. May cause itching
 - 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
 - Seborrhoea – over activity of sebaceous glands by excessive secretion of sebum resulting in an oily coating on the skin
 - Scalp sensitivity – an inflamed, sore and red scalp may prevent direct heat being placed on scalp therefore affecting the treatment of the hair
 - Recent scar/tissue injury may be tender and sensitive to heat
 - Alopecia:
 - Total hair loss on the scalp
 - Loss of hair in patches on the scalp
 - Traction alopecia – hair loss at the point of tension
 - Male pattern baldness – may present as receding hair line and hair loss at crown
 - Hair loss as a result of chemotherapy – usually temporary and hair is lost over scalp and body

- Hair loss as a result of medication or medical conditions, e.g. thyroid imbalance
- Hair loss as a result of hormonal changes, e.g. after giving birth
- Hair defects, including:
 - 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. If a hair defect is suspected the client should be referred for medical attention or advice
- The course of action to be taken if contra-indications are suspected to include:
 - Not to offer diagnosis
 - Which conditions need reporting and when
 - Whom to report to and where to record the findings
 - Referral for medical attention or advice

The importance of preventing cross-infection and cross-infestation

Taught content to include

- How to avoid cross-contamination, cross-infection or infestation – use of correct sterilising and disinfecting methods for all tools and equipment
- Ensuring the client's scalp and hair are checked prior to the service and/or treatment
- Avoidance of cross-contamination, e.g. using unclean tools or protective garments from one client could contaminate the next client's hair or scalp
- Ensure the professional salon image is maintained

The importance of tests to the hair and scalp prior to and during hair and scalp treatments

Taught content to include

- To understand the reasons why tests are carried out, e.g. the consequences of not undertaking a pull test resulting in additional hair loss due to extensive massage techniques
- 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 hair and scalp treatment finished results are as expected
- To ensure the hair and scalp treatment finished results meet the client requirements

When and how hair and scalp treatments tests are carried out

Taught content to include

- Elasticity test – may prevent or restrict application of hair and scalp treatments if the hair is stretched and does not go back to its original state
 - On wet hair, take individual 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. Hair that is porous would benefit from intensive hair treatments
 - 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
- Conducting a visual diagnostic check of the hair and scalp
 - Recent scar/tissue injury, may be tender when using combs, brushes or heat
 - Hair loss, possible after hair extension removal, medication, stress or trauma (alopecia), use tools and equipment carefully to adapt style to cover hair
- Tactile testing – designed to test if a client has full sensation and can react to soft and sharp stimuli – vibro massage
- Thermal testing – to ascertain if the client can distinguish between hot and cold stimuli, e.g. when using products which have an automatic heat reaction when mixed, applying additional heat equipment or high frequency

How test results influence hair and scalp treatments

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. where there is notable sensitivity of the scalp
- Confirming the service or treatment can proceed
- Offering alternative services where hair is either in poor condition or not compatible for electrical massage services
- Preventing damage to the scalp or hair
- Prevention of the client taking legal action – ensure all tests and test results are recorded
- Preventing the reputation of the salon being damaged
- Avoiding mistakes
- Results of tests
 - Elasticity test – may prevent or restrict some services if the hair is stretched and does not go back to its original state; will affect the treatment choice, product, techniques used and methods
 - Porosity test – the hair's ability to retain moisture, will affect the treatment choice, product, techniques and methods used
 - Tactile testing – to check settings or usage when applying high frequency and vibro massager treatments
 - Thermal testing – to ascertain if the client can distinguish between hot and cold stimuli as heat is produced during high frequency
 - Pull test – to check excess hair loss and suitability of the treatment

LO4 Understand the science of specialist hair and scalp treatments

The structure, function and actions of muscles of the scalp treatment area

Taught content to include

Muscles of the scalp area	Function	Action
Occipitalis	<ul style="list-style-type: none"> A muscle which covers the back part of the skull, near the occipital bone 	<ul style="list-style-type: none"> This muscle function is to move the scalp back
Frontalis	<ul style="list-style-type: none"> A muscle which covers the front part of the skull, near the frontal bone 	<ul style="list-style-type: none"> This muscle function is to raise the eyebrows, and wrinkle the forehead
Temporalis	<ul style="list-style-type: none"> One of the muscles of mastication It is a broad, fan-shaped muscle on each side of the head attached to the temporal bone and mandible (jaw) 	<ul style="list-style-type: none"> Contracting the temporalis muscle lifts the jaw(close), while the muscle's rear fibres cause the jaw to open
Sternocleidomastoid	<ul style="list-style-type: none"> One of the largest neck muscles. It ranges from the back of the skull at the occipital joint, and around to the front joining at the sternum and clavicle 	<ul style="list-style-type: none"> This muscle rotates the head and neck
Splenius Capitis	<ul style="list-style-type: none"> A broad, strap like muscle located in the back of the neck It connects the base of the skull to the vertebrae in the neck 	<ul style="list-style-type: none"> When one muscle acts singly, it causes the head to rotate and bend toward one side; together, these muscles bring the head into an upright position
Trapezius	<ul style="list-style-type: none"> A wide, flat, muscle that covers most of the upper back and the back of the neck Two trapezius muscles – a left and a right trapezius – that are symmetrical starting at the occipital bones and meet at the spine of the scapula/shoulder blade 	<ul style="list-style-type: none"> This muscle moves the scapular/shoulder blade and the arm, and extending the head at the neck

The position of the primary bones of the scalp treatment area

Taught content to include

Cranial bones	Position of bones
Occipital – 1 bone	<ul style="list-style-type: none">• This bone that helps protect the brain and allows the head to rotate• It is positioned at the lower back of the skull• It is curved in shape, with a channel that allows nerves and ligaments to connect the brain to the spine
Parietal – 2 bones	<ul style="list-style-type: none">• Two cranial bones joined together at a fibrous joint• They form the sides and roof of the skull that helps to protect the brain• Each bone is roughly quadrilateral in form, and has two surfaces and four borders
Temporal – 2 bones	<ul style="list-style-type: none">• These cranial bones are situated at the sides and base of the skull, and houses the structure of the ears
Frontal – 1 bone	<ul style="list-style-type: none">• This is a cranial bone that protects the delicate nervous tissues of the brain• This forms the forehead and the shape of the skull
Cervical vertebrae – 7 bones	<ul style="list-style-type: none">• Consist of seven bony rings stacked along the length of the neck to form a continuous column between the skull and the chest

The principles of the endocrine system

Taught content to include

- The endocrine system is made up of glands that produce and secrete hormones, chemical substances produced in the body that regulate the activity of cells or organs
- Principles – physical and chemical processes:
 - Hormones regulate the body's growth, metabolism and sexual development and function
 - The hormones are released into the bloodstream and may affect one or several organs throughout the body, e.g. blood supply to the hair
 - Abnormal hormone levels affect the hair growth cycle

The structure and function of the circulatory system, the lymphatic system, and the nervous system

Taught content to include

- Circulatory system structure (cardiovascular system or the vascular system):
 - The organ system that permits blood to circulate and transport nutrients (such as amino acids and electrolytes), oxygen, carbon dioxide, hormones throughout the body in a circular system
- Circulatory system function:
 - The circulatory system is made up of blood vessels that carry blood away from and towards the heart
 - Arteries carry blood away from the heart and veins carry blood back to the heart
 - Transports blood cells to and from the cells in the body to provide nourishment and hair development, e.g. circulatory problems could result in abnormal hair growth/loss of hair
 - helps in fighting diseases, stabilises temperature and the skins pH
- Lymphatic system structure:
 - Part of the vascular system and an important part of the immune system, comprising a large network of lymphatic vessels that carry a clear fluid called lymph
- Lymphatic system function:
 - The main function is that of defence in the immune system, e.g. protects the skin, prevents diseases
- Nervous system structure:
 - The two main parts: the central nervous system (the brain and spinal cord) and the peripheral nervous system (the nerves that carry impulses to and from the central nervous system)
- Nervous system function:
 - Gathers information from inside the body and the outside environment, e.g. will be responsible for detecting hot and cold sensations on the skin

The structure and function of the hair and skin

Taught content to include

Structure	Function
Cuticle – overlapping colourless scales	Forms a protective surface to the hair
Cortex – fibrous middle layer containing colour pigments	Contains colour pigments and gives the hair its strength and where all chemical and physical changes take place
Medulla – central innermost part of the hair	No known function and does not play any useful part in hairdressing processes and treatments
Epidermis	The protective surface layer of the skin
Dermis	The thickest layer of the skin containing the hair follicle, blood supply, sweat gland, nerve endings and lymph vessels
Subcutaneous layer	The fatty layer, provides insulation and energy for the body
Sensory nerve endings	Sensory organs for detecting heat, touch, cold and pain
Lymph vessels	Filter and transport fluid away from tissues
Blood supply	Provide oxygen and nutrients to the hair papilla
Sebaceous gland	Produces sebum to protect the hair and skin
Dermal papilla	The growing area of the hair follicle
Sweat gland (apocrine and eccrine)	Produces sweat to cool the skin, apocrine found on the scalp, eccrine all over the body
Arrector pili muscle	Muscle contracts to raise the hair into an upright position to trap in air for warmth
Hair follicle	Tube-like structure from which the hair grows
Hair shaft	The hair, provides protection to the scalp from the sun
Hair bulb	The area at the base of the follicle containing the dermal papilla

The growth cycle of hair

Taught content to include

- Anagen – growing stage; active stage, 80-90% of the hair is in this stage at any one time
- Catagen – changing stage, 1-2% of hair is in this stage at any one time
- Telogen – resting stage, the hair is not growing and is separated from the hair bulb, 10-15% of the hair is at this stage at any one time
- Early anagen – new hair begins to form
- Knowledge of hair growth will enable learners to give advice on the frequency of visits for maintaining styles
- Knowledge of how hormones affect the growth cycle
- Knowledge relating to related to hair growth problems

The reasons for normal and abnormal hair growth

Taught content to include

- Topical
 - Due to stimulation or friction in the area, excess hair growth results
 - Stimulation of the blood supply results in the hair receiving more nourishment, which allows it to grow deeper and coarser
 - Examples of topical stimulation are tweezing, plaster casts chaffing, shaving or x-rays
- Normal congenital
 - Exists at or before birth
 - Can be broken down to abnormal or normal congenital
 - Hair growth can be hereditary as can be passed down from generation, therefore this is the most common cause of hair growth
 - Certain ethnic groups can be more hairy than others
- Abnormal congenital
 - People vary in their sensitivity to androgens, particularly females who have lower levels of female hormones and therefore often develop superfluous hair growth
- Systemic
 - This can be caused by both normal and abnormal hormonal changes within the body, which stimulates excess hair growth
 - Examples of normal systemic changes are puberty, pregnancy and menopause
 - Examples of abnormal hormonal changes due to endocrine disorders are Cushing's syndrome, and adrenogenital syndrome

The effects of chemotherapy and radiotherapy on hair growth

Taught content to include

- Chemotherapy
 - Attacks fast growing cells and can therefore cause temporary but sometimes major losses of hairs in their growth cycle (anagen effluvium)
 - Hair lost will usually regrow spontaneously once treatment has finished
 - Hair loss initiated by chemotherapy usually commences within the first few weeks of treatment
 - Regrowth will initially be of baby fine white hair which will develop into pigmented terminal hair within months
 - This new hair may develop unfamiliar physical characteristics (e.g. changes in the levels of straightness, waviness etc.). These changes are usually temporary
- Radiotherapy
 - Radiotherapy may cause diffuse or total hair loss depending upon dosage and frequency of treatment required
 - General hair loss may follow a course of radiotherapy. Regrowth will usually commence within six - twelve weeks
 - Hair recovery following Radiotherapy administered directly to the scalp may take longer. The re-growing hair may exhibit changes in texture, colour, straightness or waviness etc.

The different types of hair loss, their causes and how to recognise them

Taught content to include

Different types of hair loss	Causes	How to recognise	Possible treatments/avoidance
Alopecia Areata	<ul style="list-style-type: none"> • Alopecia areata is a disease that causes hair to fall out in small patches • It develops when the immune system attacks the hair follicles, resulting in hair loss • No known cure for alopecia areata, some treatments that may help to stimulate the scalp 	<ul style="list-style-type: none"> • Small, round (or oval) patches of hair loss on the scalp, beard area of the face or other areas • Hair loss and regrowth at the same time in different areas of the body • Significant hair loss in a very short period of time • Hair loss that is mostly on one side of the scalp, instead of both sides 	<ul style="list-style-type: none"> • High frequency may help stimulate blood supply to promote new growth

Alopecia Totalis	<ul style="list-style-type: none"> • A genetic hair condition in which an individual loses hair only from the scalp • Sometimes described as an intermediary disorder between alopecia areata and alopecia universalis that causes entire body hair loss 	<ul style="list-style-type: none"> • Small patches of hair loss that can lead to complete baldness of the scalp hair 	<ul style="list-style-type: none"> • High frequency may stimulate blood supply to promote growth
Alopecia Universalis	<ul style="list-style-type: none"> • The complete loss of hair on the scalp and body • Exact cause is unknown, but may be due to be an auto-immune condition in which the person's immune system mistakenly attacks the hair follicles 	<ul style="list-style-type: none"> • Hair loss can be over the entire body including eyebrows, eyelashes and pubic hair 	<ul style="list-style-type: none"> • There is currently no cure but sometimes hair regrowth occurs on its own, even after many years
Androgenic Alopecia	<ul style="list-style-type: none"> • Androgenic alopecia in women is due to the action of androgens, male hormones that are typically present in only small amounts • Androgenic alopecia can be caused by a variety of factors tied to the actions of hormones, including some ovarian cysts, taking high androgen index birth control pills, pregnancy, and menopause 	<ul style="list-style-type: none"> • Hair loss is typically around the crown, similar to male pattern baldness 	<ul style="list-style-type: none"> • High frequency may stimulate blood supply to promote growth
Traction Alopecia	<ul style="list-style-type: none"> • A form of alopecia, or gradual hair loss, caused primarily by pulling force being applied to the hair • Common causes include frequently wearing hair in a particularly tight ponytail, pigtails, or braids • Other causes can include overuse of hair clips to keep hair out of face • Commonly seen as a recession of the hairline but may affect other areas of the scalp 	<ul style="list-style-type: none"> • Patches of hair loss around areas of tension 	<ul style="list-style-type: none"> • Educate clients on the correct types, application and removal of hairbands, clips and added hair • Ensure when adding hair, clips and accessories that they are secured safely without excessive use of force

Cicatricial Alopecia	<ul style="list-style-type: none"> • A diverse group of rare disorders that destroy the hair follicle, replace it with scar tissue, and cause permanent hair loss • In some cases, hair loss is gradual, without symptoms, and is unnoticed for long periods • In other cases, hair loss is associated with severe itching, burning and pain and is rapidly progressive 	<ul style="list-style-type: none"> • Affected areas of the scalp may show signs of inflammation, or have redness, scaling, increased or decreased pigmentation 	<ul style="list-style-type: none"> • Refer to trichologist or GP/doctor • Hair will not re-grow on the scarred tissue • Antibiotics and steroids may be prescribed by a specialist
Alopecia Barbae	<ul style="list-style-type: none"> • A type of hair loss in the beard area • It is a more specific description of a general condition, alopecia areata 	<ul style="list-style-type: none"> • Small, round (or oval) patches of hair loss on the scalp, beard area of the face or other areas • Hair loss and regrowth at the same time in different areas of the body • Significant hair loss in a very short period of time 	<ul style="list-style-type: none"> • High frequency may stimulate blood supply to promote growth
Anagen Effluvium	<ul style="list-style-type: none"> • The loss of anagen or growth phase hairs • Mostly caused by radiation therapy to the head and systemic chemotherapy, especially with alkylating agents 	<ul style="list-style-type: none"> • Widespread hair loss often seen as general thinning 	<ul style="list-style-type: none"> • Usually, hair will grow back after treatment
Telogen Effluvium	<ul style="list-style-type: none"> • Caused by a disturbance in the telogen phase of the growth cycle • No known cause but can be due to shock or stress 	<ul style="list-style-type: none"> • Widespread hair loss often seen as general thinning 	<ul style="list-style-type: none"> • Usually hair will grow back on its own • High frequency may stimulate blood supply to promote growth
Trichotillomania (hair pulling disorder)	<ul style="list-style-type: none"> • Hair loss and breakage caused by the physical damage, e.g. uncontrollable urge to pull out the hair 	<ul style="list-style-type: none"> • Bald patches left on the head tend to have an unusual shape and may affect one side more than the other 	<ul style="list-style-type: none"> • Refer to trichologist doctor/GP for medical help

	<ul style="list-style-type: none"> • Possible causes are in response to a stressful situation, or by habit • The hair will be pulled on the head or in other places, such as the eyebrows or eyelashes 		
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The stages of male and female pattern hair loss using different classifications such as Hamilton and Ludwig

Taught content to include

- Male pattern hair loss
 - Male pattern hair loss is believed to be due to a combination of genetics and the male hormone dihydrotestosterone
 - There is no known cure other than hair transplants
- Hamilton scale – Measures male hair loss
 - Stage 1 – very minor or no recession of the hair line, therefore no need for treatment
 - Stage 2 – triangular and typically symmetrical areas of recession at the front temporal area. Hair loss remains ahead of a line several centimetres in front of the ears. Hair falls and may become less dense in the central front part of the scalp
 - Stage 3 – this represents the lowest extent of hair loss considered sufficient. Most scalps at this stage have deep symmetrical recession showing at the temples that are bare or only sparsely covered by hair. With stage 3 vertex, the crown is added since it's a common occurrence with age. Hair loss is primarily from the vertex with limited recession of the front temporal hairline
 - Stage 4 – recession at the front temporal areas is more severe than stage 3. There is a decisive lack of hair on the crown. A band of moderately dense hair extending across the top separates the two areas of hair loss between front temporal and crown. This band bridges between the hair covered areas on the side of the head
 - Stage 5 – hair loss at the vertex region is still separated from the front temporal region but the division is much less distinct. The band of hair extending across the crown is noticeably narrower and thinner
 - Stage 6 – hair loss at the vertex and front temporal regions are larger. When viewed from above, stages 5 to 7 show the remaining hair at the sides and back as a distinct horseshoe shape
 - Stage 7 – this is the most advanced or severe form of hair loss. Only a narrow band of hair in a horseshoe shape survives on the sides and back of the scalp. This hair may be fine and less dense than before. At the nape of the neck the hair is sparse with a semi-circle over both ears
- Ludwig (female hair loss) – to diagnose the severity of female hair loss
 - Uses 3 different classifications
 - Type I – in this stage, hair loss is considered to be mild. Most women may have difficulty noticing that hair loss has occurred, as the frontal hairline remains relatively unaffected. Hair loss may occur on the top and front of the scalp, however. Such hair loss may be noticeable when the hair is parted down the centre of the scalp, as more and more scalp will become visible over time

- Type II – hair loss is considered moderate. In this stage, women may notice each of the following: Thinning, shedding, general decrease in volume, and a centre part that continues to widen over time. Depending on the severity, a hair transplant procedure may be a viable option for women who exhibit a Type II classification
- Type III – is the final and most extreme classification of female hair loss. In this stage, hair is so thin that it has difficulty camouflaging the scalp, rendering it visible to the naked eye. This may be worsened by several factors, including progressive thinning, and extensive loss

LO5 Understand the tools, equipment, products and techniques used for specialist hair and scalp treatments

The use of treatments and products for a range of hair and scalp conditions

Taught content to include

- Product options available, their suitability and how to identify the correct choice of product required for individual personalised hair and/or scalp treatment services
- The types of products available which may include a range of shampoos, conditioners or treatment packages including:
 - Premixed – off the shelf
 - Pre-blended – bespoke or made for specific clients
 - Specific retailers own range
- Scalp treatment products include:
 - Tonics
 - Dry, dandruff, oily
 - Spirit-based
 - Invigorating
 - Calming
 - Oil-based
 - Moisture
 - Coal tar
 - Medicated
 - Salicylic acid
 - Sulphur
 - Scalp tonic
 - The scalp tonic must be the appropriate tonic for the client's scalp condition. Regular use of a scalp tonic can nourish the scalp adding moisture and oil. It can strengthen hair follicles and inhibit dandruff
 - Hair re-growth tonic
 - Has claims to help stimulate hair growth by nourishing the scalp and encourage hair growth by increasing circulation and cleansing build-up of salts and debris from around the pores inhibiting the rate of hair growth
- Hair treatment products examples:
 - Moisture intensive
 - Oil-based
 - Soya protein based
 - Protein
 - Cade oil/juniper
- Hair strengthening oil
 - This is a tonic or oil and is suitable for most hair types that acts as a protective barrier around the cuticle
- Rescue oil
 - This oil can be used on a regular basis. It is a non-sticky formula and nourishes and replenishes the cuticle scales and improves the overall condition or appearance of the hair

- Hair anti-fall tonic
 - Hair anti-fall tonics contains an arginine-based formula that helps build broken hair fibre and boosts microcirculation to the root area – can be applied to scalp
- Therapeutic hair oil tonic
 - A therapeutic hair oil tonic is a natural product. It is suitable for all hair types – can be used regularly to help nourish the scalp and revitalise the hair

The medical treatments and technological advancements for hair loss and hair and scalp conditions

Taught content to include

- Hair restoration treatment
 - Usually tonics or shampoos to slow the telogen phase of hair growth
- Laser treatment
 - Restoration of hair is combination of medical and surgical treatment for different forms of hair loss
 - Surgical as well as non-surgical methods are used for the purpose of hair restoration and these processes help to counteract or slow down the symptoms of hair loss
 - The surgical and non-surgical methods are used separately or in combination for the proper treatment
- Hormone treatments and prescriptive drugs (as derived from medical advisors)
 - Hormone replacement therapy (HRT) involves taking female hormones, usually oestrogen and progesterone to balance out hormone levels
 - Usually in the form of pills, creams, or patches

The importance of following salon and manufacturers' instructions during hair and scalp treatment services

Taught content to include

- To ensure the planned realistic hair and/or scalp treatment outcomes is achieved
- To ensure the treatment plan is followed in a logical sequence
- To ensure the correct products or treatment is used
- To prevent hazards
- To minimise risks
- To avoid problems or mistakes
- To avoid legal action

The importance of using products cost effectively

Taught content to include

- Applying products in a logical sequence
- Applying products evenly to minimise wastage, e.g. sectioning of the hair and using a bowl and brush to ensure even distribution of a treatment product may be required to prevent waste
- The effect on the hair and/or scalp if excessive products are used, e.g. saturating fine hair could result in difficulty in dressing the style, or the scalp becoming irritated by the product
- The safe storage of products as some may lose their ability to work or may present a risk or hazard; some products require storing away from direct heat and sunlight
- Follow salon and organisation policy, e.g. ensuring manufacturers' instructions are adhered to, to optimise their usage when using products for treatments
- Following manufacturers' instructions to ensure correct application of products and prevent wastage
- Effects on the environment to include:
 - The safe disposing of unwanted oils
 - Following salon and organisation policy when using products

Assessment requirements

Learners must complete all assessment requirements related to this unit:

1. Service portfolio
2. Theory examination

1. Service portfolio

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

The performance of learning outcome 1 must be demonstrated as part of all technical observations and will be recorded on **at least 3 occasions**. This should be conducted on a range of new and existing clients.

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

Document History

Version	Issue Date	Changes	Role
1.0	02/09/19	First published	Head of Qualifications and Processing