

UBT213M

Anatomy and physiology for beauty counter consultants

Unit reference number: D/615/0758

Level: 2

Guided Learning (GL) hours: 20

Overview

The aim of this unit is to provide learners with the necessary underpinning knowledge of human anatomy and physiology in the areas under treatment. Learners will develop an understanding of the role of the relevant body systems and associated pathology, enabling the learners to have a sound platform to carry out beauty consultancy techniques safely and confidently.

Learning outcomes

On completion of this unit, learners will:

LO1 Understand the role and organisation of the human body

LO2 Understand the structure and function of the systems of the body in the areas under treatment

LO3 Understand the relevant pathology associated with the systems of the body in the areas under treatment

Assessment requirements

Learners must complete the assessment requirements related to this unit:

1. External examination
2. Graded synoptic assessment

1. External examination

The theory content of LO1 and LO2 will be tested by an external examination towards the end of the period of learning.

External examinations will test knowledge and understanding from across the whole vocational area (mandatory units). Learners should use the unit content section of this unit to aid revision since exam questions will test the full breadth of this section.

External examinations will be set and marked by VTCT and will contribute to the overall qualification grade.

2. Graded synoptic assessment

In the last term or final third of their qualification, learners will be required to undertake a graded synoptic assessment. This will require learners to carry out a range of services from across the whole vocational area (mandatory units). Assessment coverage will vary year on year, although all services will be covered over time.

VTCT will set a brief for centres which will detail the services to be covered in the graded synoptic assessment. Grading descriptors for the synoptic assessment will also be provided by VTCT.

The graded synoptic assessment will be marked and graded by centre staff and externally verified by VTCT.

The graded synoptic assessment will contribute to the overall qualification grade.

Unit content

LO1 Understand the role and organisation of the human body

Learners must know the organisation of the human body:

- The human body is a single structure but it is organised at different levels starting with the cell. Cells are organised into tissues, and tissues form organs. Organs are combined into organ systems

Learners must know the basic structure of a cell:

- Cells are made up of many structural components and organelles
 - Cell membrane, cytoplasm, nucleus, mitochondria, ribosomes, chromosomes

Learners must know the main tissue types:

- Epithelial tissue – is a sheet of cells that covers the body surface or lines a body cavity
- Connective tissue – connects, supports, binds or separates other tissues or organs
- Muscular tissue – is composed of cells that have the special ability to shorten or contract. It can be categorised into skeletal muscle tissue, smooth muscle tissue and cardiac tissue
- Nervous tissue – is found in the brain, spinal cord, and nerves. It is responsible for co-ordinating and controlling many body activities

Learners must know anatomical terms of motion:

- Anatomy uses its own collection of terms and each has a very specific meaning to describe an anatomical movement
 - Flexion, extension, abduction, adduction, pronation, supination, dorsi-flexion, plantar flexion, inversion, eversion

Learners must know the anatomical terms of direction:

- Directional terms describe the positions of structures relative to other structures or locations in the body
 - Anterior, posterior, medial, lateral, origin, insertion

LO2 Understand the structure and function of the systems of the body in the areas under treatment

Learners must know the structure and function of the skin:

- The structure of the skin has three main layers
 - The epidermis horny layer (stratum corneum), transparent layer (stratum lucidum), granular layer (stratum granulosum), prickle cell layer (stratum spinosum), basal layer (stratum germinativum)
 - The dermis (papillary layer, reticular layer, sebaceous gland, arrector pili muscle, dermal papillae, hair follicle, sweat gland (eccrine, apocrine), sweat pore, sweat duct, sensory nerves, motor nerves, arteriole, venule, lymphatic vessel, collagen, elastin)
 - The subcutaneous layer (areolar, adipose, fat cells)
- The functions of the skin
 - Secretion
 - Heat regulation
 - Absorption
 - Protection
 - Excretion
 - Sensation
 - Vitamin D formation
 - Melanin formation
- Growth and repair stages of the skin
 - Cell formation, keratinisation, desquamation
- How to recognise different skin types and conditions
 - Mature, sensitive, dehydrated, normal, oily, combination, dry, comedones, milia, broken capillaries, pustules, papules, open pores, hyperpigmentation, hypopigmentation, fine lines, wrinkles
- Factors which may affect the skin ageing process
 - Health, lifestyle, medication, age, diet, smoking, UV rays, stress, medical conditions, climate
- How do environmental and lifestyle factors affect the skin condition
 - Skin becomes rougher
 - Skin becomes slack. The loss of the elastic tissue (elastin) in the skin with age causes the skin to hang loosely
 - Skin becomes more transparent. This is caused by thinning of the epidermis
 - Skin becomes more fragile. This is caused by a flattening of the area where the epidermis and dermis come together
 - Loss of fat below the skin in the cheeks, temples, chin, nose, and eye area may result in loosening skin, sunken eyes, and a "skeletal" appearance
- Compare skin types and characteristics of different ethnic groups
 - Fair skin is usually defined as skin that appears between porcelain and bisque in colour. Among the fair-skinned are Caucasians, as well as light-skinned Asians and Latinas. Fair skin is often very susceptible to sensitivity, irritation and sun-burn, scars heal well, signs of ageing appear earlier and there is a greater chance of skin cancer
 - Medium skin is usually defined as olive. Generally East Asian, Latin, Mediterranean or Middle Eastern belong to this skin group. Medium skin tones have more melanin, which results in less sun damage and premature ageing. Skin is usually thicker, which often means fewer wrinkles, darker thicker scars are common and skin cancer is rare

- Dark skin tones range from coffee brown to ebony, African-American and Afro-Caribbean fall into this category. This skin type is best protected against the sun's UV rays, the signs of ageing appear very late, formation of keloids are possible, pigmentation changes may occur and skin cancers are very rare

Learners must know the structure and function of the skeletal system:

- The functions of the skeleton
 - Gives shape and support forming a framework for the body
 - Protects delicate underlying structures
 - Provides attachment for tendons and muscles
 - Red blood cells form in red bone marrow
 - Provides movement and leverage
 - Provides calcium and mineral storage
- Structure of the skeleton
 - Bones of the hand and upper limbs (radius, ulna, carpals, metacarpals, phalanges)
 - Bones of the foot and lower limb (tibia, fibula, tarsals, metatarsals, phalanges)
 - Bones of the cranium (temporal, occipital, parietal, frontal, sphenoid, ethmoid, zygomatic, nasal, mandible, maxillae, nasal, vomer, turbinate, lacrimal, palatine)
 - Bones of the chest and shoulders (cervical vertebrae, clavicle, scapula, humerus, sternum)

Learners must know the structure and function of the muscular system:

- The function of the muscular system
 - Heat production
 - Movement
- Structure of the muscular system
 - Muscle tissue is categorised into three distinct types – skeletal, cardiac, and smooth. Each type of muscle tissue in the human body has a unique structure and a specific role. Skeletal muscle moves bones and other structures. Cardiac muscle contracts the heart to pump blood. Smooth muscle tissue forms organs like the stomach and bladder
- The location of the main muscles and actions
 - Muscles of the head, face, neck and shoulders (frontalis, occipitalis, temporalis, corrugator, orbicularis oculi, orbicularis oris, mentalis, buccinator, risorius, levator labii superioris, nasalis, depressor labii inferioris, masseter, temporalis, sterno-cleido mastoid, trapezius, platysma)

Learners must know the structure and function of the cardiovascular system:

- The functions of the cardiovascular system
 - Transport
 - Regulation of body temperature
 - Protection
 - Provide a clotting mechanism

- Structure of the cardiovascular system
 - The cardiovascular system is a complex network containing the heart, blood vessels and blood. Arteries are blood vessels which carry blood from the heart to the body. Veins are blood vessels which carry blood from the body to the heart. There are also microscopic blood vessels which connect arteries and veins together called capillaries
- Location and role of primary vessels
 - Common carotid artery, external carotid artery, occipital artery, facial artery, temporal artery
 - External jugular vein, internal jugular vein, common facial vein, temporal vein, occipital vein, subclavian vein
- The role of the heart and the circulatory paths
 - Systemic circulation (this carries oxygenated blood away from the heart to the body, and returns deoxygenated blood back to the heart)
 - Pulmonary circulation (this carries deoxygenated blood away from the heart, to the lungs, and returns oxygenated blood back to the heart)

Learners must know the structure and function of the lymphatic system:

- The function of the lymphatic system
 - Fights infection by producing specialised cells
 - Transports digested fats
 - Removes waste, toxins and excess tissue fluid from tissues and cells
- The structure of the lymphatic system
 - Composition of lymphatic fluid (lymphocytes), lymphatic capillaries, lymphatic vessels, lymphatic nodes, lymphatic tissue
- Functions of the lymph nodes
 - Filter lymph and assist the immune system in building an immune response by producing lymphocytes
- The location of the main lymphatic nodes of the face
 - Buccal, submandibular, submental, parotid, occipital, post and pre auricular, deep cervical, superficial cervical

LO3 Understand the relevant pathology associated with the systems of the body in the areas under treatment

Learners must know the common pathology associated with the skin:

- Common diseases and disorders of the skin
 - Infestations (scabies, pediculosis capitis)
 - Bacterial infections (impetigo, conjunctivitis, blepharitis, stye, folliculitis)
 - Viral infections (chickenpox, herpes, influenza, viral meningitis, mumps)
 - Fungal infection (ringworm, tinea capitis)
 - Skin conditions (psoriasis, eczema, dermatitis, sebaceous cysts, acne, rosacea)
 - Pigmentation disorders (vitiligo, chloasma, lentigo, naevi, spider naevus, ephelides)
 - Skin cancers (basal cell carcinoma, squamous cell carcinoma, malignant melanoma)

Learners must know the common pathology associated with the skeletal system:

- Common diseases and disorders of the skeletal system
 - Osteoporosis, osteoarthritis, rheumatoid arthritis

Learners must know the common pathology associated with the muscular system:

- Common diseases and disorders of the muscular system
 - Muscular dystrophy, fibromyalgia

Learners must know the common pathology associated with the cardiovascular system:

- Common diseases and disorders of the cardio vascular system
 - Thrombosis, high and low blood pressure

Learners must know the common pathology associated with the lymphatic system:

- Common diseases and disorders of the lymphatic system
 - Oedema, glandular fever, tonsillitis

Skin cancer awareness

Please note this information will not be assessed for the achievement of this unit.

Public awareness of skin cancer has never been higher, and yet skin cancer remains the fastest growing cancer in the UK, especially amongst young people. The chances of a positive outcome can be dramatically increased with early identification and diagnosis.

Professionals in hair, beauty, sports massage and health and wellbeing industries work closely with clients and in many cases have sight of areas of skin which may not be easily visible to the client. An informed awareness of the signs, symptoms and changes of appearance to be aware of when checking for early signs of cancer is a crucial tool for the conscientious practitioner in order to provide the most thorough service and in some cases, possibly lifesaving information signposting.

Signs to look for when checking moles include utilising the ABCDE guide:

A - Asymmetry – the two halves of the area/mole may differ in their shape and not match.

B - Border – the edges of the mole area may be irregular or blurred and sometimes show notches or look 'ragged'.

C - Colour – this may be uneven and patchy. Different shades of black, brown and pink may be seen.

D - Diameter – most but not all melanomas are at least 6mm in diameter. If any mole gets bigger or changes see your doctor.

E - Elevation/evolving – elevation means the mole is raised above the surface and has an uneven surface. Looks different from the rest or changing in size, shape or colour. Anyone can get a suspicious mole or patch of skin checked out for free by the NHS by visiting their doctor, who may then refer to a dermatologist (an expert in diagnosing skin cancer).

If you require any additional NHS information please refer to <https://www.nhs.uk/be-clear-on-cancer/symptoms/skin-cancer>

If your learners are interested in learning more about skin cancer awareness alongside this qualification, VTCT runs the following qualification: VTCT Level 2 Award in Skin Cancer Awareness for Non-Healthcare Professionals.

This qualification has been specifically designed for those working in the sports massage, health and wellbeing, beauty, hairdressing and barbering sectors. It will enable learners to identify any changes to their client's skin and to highlight those changes to the client using appropriate language and communication skills. It will enable the learner to raise awareness of skin cancer and signpost their clients to public information about skin cancer.

This qualification will enable hair, beauty and wellbeing professionals to gain the appropriate knowledge and communication skills required to provide non-diagnostic, professional advice and information to clients in a discrete, empathetic and confidential manner.

For more information please refer to the Record of Assessment book:

<https://qualifications.vtct.org.uk/finder/qualfinder/1Record%20of%20Assessment%20Book/AG20529.pdf>

Resources

The special resources required for this unit are access to good quality anatomy and physiology text books, E books, DVDs, CDs.

Delivery guidance

Teachers are encouraged to use innovative, practical and engaging delivery methods to enhance the learning experience. Learners may benefit from:

- Using interactive information and technology, systems and hardware so they can learn about concepts and theories and produce visual aids to expand knowledge on anatomy and physiology

Links with other units

This unit is closely linked with the following units:

UCO34M Health, safety and hygiene

The health and safety unit will provide knowledge and understanding of the responsibilities for health and safety as defined by any specific legislation covering the role of a professional therapist. This unit greatly underpins all practical unit delivery.

UBT193M Consultation techniques and client care

Client consultation is an effective and necessary tool for the beauty consultant to help establish the unique needs and requirements of the customer so they can recommend the most appropriate products and provide the best advice. Effective record keeping will allow the consultant to keep the customer informed of any offers or promotions and will inform any future campaigns as to the specific needs and requirements of the customer, making marketing more effective. This unit underpins all technical units within this qualification and should be delivered prior to any technical beauty therapy unit. Learners will be required to apply their knowledge and understanding of health and safety when preparing for and providing services/treatments in real or realistic working environment.

UBT201M Make-up applications

The make-up applications unit is a key tool for the beauty counter consultant. Learners will develop the skills and knowledge to be able to understand and apply basic make-up services for a client and to be able to adapt them for a variety of occasions. Learners will develop their knowledge and skills to prepare and provide a professional make-up service.

UBT209M Instruct on make-up application

This unit is a vital tool for the beauty counter consultant. By achieving an effective consultation it is possible for the learner to provide a full and complete service for the customer. Working in tangent with the make-up applications unit, learners will develop the skills to ascertain the customer's needs and wishes enabling them to select and apply make-up for a customer and offer advice and guidance on how the customer can achieve the same look at home.

UBT210M Instruct on product applications

The instruct on product application unit works hand in hand with the consultation and record keeping unit to provide the learner with the skills and knowledge required to ascertain the customer's needs correctly, demonstrating product application to achieve maximum benefits and providing advice and guidance on how to apply the products correctly for effective home care use.

Graded synoptic assessment

At the end of the qualification of which this unit forms part, there will be a graded synoptic assessment which will assess the learner's ability to identify and use effectively in an integrated way an appropriate selection of skills, techniques, concepts, theories, and knowledge from a number of units from within the qualification. It is therefore necessary and important that units are delivered and assessed together and synoptically to prepare learners suitably for their final graded assessment.

Version	Details of amendments	Date
v5	Skin cancer awareness page added	14/06/17