

Scheme of work

For each VTCT (ITEC) qualification, the lecturer/centre must complete a scheme of work for each unit indicating how the Lecturer is planning to cover the unit content throughout the course. Set out the planned sessions in terms of learning outcomes to be achieved. These should match those stated within the VTCT (ITEC) unit specification. Include all units of each course offered. Hours should meet the minimum guided learning hours listed within the unit specification.

Unit title: iUCT36 - Knowledge of anatomy and physiology for complementary therapies

Total contact tuition hours proposed: 90

Lecturer(s) responsible:

Learning outcomes	Lecture content	Suggested resources	Approx. hours
Introductory session	<ul style="list-style-type: none"> College rules and regulations College mission statement ITEC rules and regulations Health & Safety Timetable Dates – holidays etc. Syllabus Recommended books Uniform 	<ul style="list-style-type: none"> PowerPoint Presentation VLE Lecture Q&A Using all the documents listed to ensure the students understand the college expectations and their commitment to the course 	
LO1 Know the organisation of the body			
1.1 State the anatomical regions of the body	<ul style="list-style-type: none"> Cranial Frontal Occipital Cervical Thoracic Axillary Brachial Cubital Carpal Palmar Digital 	<ul style="list-style-type: none"> OHP/whiteboard PowerPoint VLE Activities Lecture Q&A Homework Test 	9

	<ul style="list-style-type: none"> • Popliteal • Patellar • Tarsal • Plantar 		
1.2. Describe the directional terms of the body	<ul style="list-style-type: none"> • Medial • Lateral • Proximal • Distal • Anterior • Posterior • Superior • Inferior • Superficial • Deep 		
1.3. Describe the basic chemical organisation of the body	<ul style="list-style-type: none"> • Simple chemicals (e.g. oxygen, carbon dioxide) • Nutrient chemicals (e.g. carbohydrates, fats (lipids), proteins, vitamins, minerals, fibre, water) • Complex chemicals (e.g. ATP, DNA, body fluids) 		
1.4. Describe the basic structure of a cell	<ul style="list-style-type: none"> • Cell membrane • Nuclear membrane • Nucleus • Nucleolus • Cytoplasm • Centrosome • Golgi apparatus • Mitochondria • Lysosome • Protoplasm • Chromosome • Endoplasmic reticulum • Ribosome • Centromere • Vacuoles • Centrioles • Chromatids 		
1.5. State the major tissue types and their location	<ul style="list-style-type: none"> • Epithelial tissue • Nervous tissue 		

	<ul style="list-style-type: none"> • Muscular tissue <ul style="list-style-type: none"> - Striated - Non-striated - Cardiac • Connective tissue <ul style="list-style-type: none"> - Areolar - Adipose - Cartilage - Bone - Blood - Lymph 		
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LO2 Know the structure, function and pathologies of the skin, hair and nail			
2.1. Describe the structure and functions of the skin	<ul style="list-style-type: none"> • Epidermis <ul style="list-style-type: none"> - Stratum corneum - Stratum lucidum - Stratum granulosum - Stratum spinosum/malpighian - Stratum germinativum/basal layer • Dermis <ul style="list-style-type: none"> - Blood supply - Lymphatic supply - Hair follicle - Hair - Sebaceous gland - Sweat gland: <ul style="list-style-type: none"> ▪ Eccrine ▪ Apocrine - Sensory nerve endings - Dermal papilla - Collagen - Elastin - Histiocytes - Mast cells - Fibroblasts - Erector pili muscle • Subcutaneous/Adipose layer <ul style="list-style-type: none"> - The structure and function of the fatty layer found underneath the dermis • Function <ul style="list-style-type: none"> - Secretion - Heat regulation - Absorption 	<ul style="list-style-type: none"> • OHP/Whiteboard • PowerPoint • VLE • Activities • Lecture • Q&A • Handout • Homework • Test 	9

	<ul style="list-style-type: none"> - Protection/acid mantle (composition and formation) - Elimination/excretion - Sensation - Vitamin D formation (7-dehydro-cholesterol) 		
2.2. State the skin types and factors that affect the skin	<ul style="list-style-type: none"> • Dry • Oily • Combination • Mature skin • Young skin • Age • UV damage • Diet • Smoking • Alcohol • Central heating • Air conditioning • Stress 		
2.3. Describe the structure and function of the hair	<ul style="list-style-type: none"> • Lanugo • Vellus • Terminal • Cuticle • Cortex • Medulla • Dermal papilla 		
2.4. Describe the structure and function of the nail	<ul style="list-style-type: none"> • Free edge • Cuticle • Nail plate • Nail bed • Matrix • Nail wall 		
2.5. Describe diseases and disorders of the skin, hair and nails	<ul style="list-style-type: none"> • The skin to include: <ul style="list-style-type: none"> - Infestations <ul style="list-style-type: none"> ▪ Scabies ▪ Pediculosis corporis - Congenital <ul style="list-style-type: none"> ▪ Eczema ▪ Psoriasis ▪ Dermatitis 		

	<ul style="list-style-type: none"> - Bacterial <ul style="list-style-type: none"> ▪ Acne vulgaris ▪ Impetigo ▪ Acne rosacea ▪ Boils ▪ Folliculitis - Viral <ul style="list-style-type: none"> ▪ Warts ▪ Herpes simplex ▪ Herpes zoster - Fungal <ul style="list-style-type: none"> ▪ Tinea corporis (ringworm) ▪ Tinea capitis ▪ Tinea pedis - Pigmentation disorders <ul style="list-style-type: none"> ▪ Vitiligo ▪ Albinism ▪ Chloasma ▪ Ephelides ▪ Lentigo ▪ Moles (papilloma) ▪ Naevae ▪ Port wine stain ▪ Leucoderma - General disorders/conditions <ul style="list-style-type: none"> ▪ UV damage ▪ Urticaria ▪ Allergic reaction ▪ Sensitive skin ▪ Milia ▪ Comedones ▪ Dehydrated skin ▪ Broken capillaries ▪ Pustules ▪ Crow's feet ▪ Papules ▪ Open pores ▪ Hyperpigmentation ▪ Hypopigmentation ▪ Dermatitis papulosa nigra 		
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	<ul style="list-style-type: none"> ▪ Pseudo folliculitis ▪ Keloid scarring ▪ Ingrowing hairs ▪ Thin skin ▪ Papilloma - Skin cancers <ul style="list-style-type: none"> ▪ Melanoma ▪ Carcinoma • The hair to include: <ul style="list-style-type: none"> - Alopecia - Hirsutism - Ingrown hair - Pediculosis capitis - Pediculosis pubis • The nails to include: <ul style="list-style-type: none"> - Transverse ridges - Vertical ridges - Blue nail - Psoriasis - Eczema - Tinea unguium - Paronychia - Whitlow - Sepsis - Leuconychia - Pitting 		
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LO3 Know the structure, function and pathologies of the skeletal system			
3.1. Describe the structure and functions of the skeleton	<ul style="list-style-type: none"> • Compact • Cancellous • Long • Short • Flat • Irregular • Sesamoid • Support • Attachment • Movement • Forms erythrocytes • Stores calcium 	<ul style="list-style-type: none"> • OHP/Whiteboard • PowerPoint • VLE • Activities • Lecture • Q&A • Handout • Homework • Test 	9

	<ul style="list-style-type: none"> • Protection 		
3.2. State the bones of the head, neck, upper limbs, hands, lower limbs and feet	<ul style="list-style-type: none"> • Cranium <ul style="list-style-type: none"> - Parietal - Frontal - Ethmoid - Sphenoid - Occipital - Temporal • Facial <ul style="list-style-type: none"> - Nasal - Zygomatic - Maxilla - Lacrimal - Turbinator - Palatine - Mandible - Vomer • Shoulder girdle <ul style="list-style-type: none"> - Scapula - Clavicle - Humerus • Neck <ul style="list-style-type: none"> - Cervical vertebrae • Thoracic cage <ul style="list-style-type: none"> - Ribs - Sternum - Thoracic vertebrae • Lower arm and hand <ul style="list-style-type: none"> - Ulna - Radius - Carpals - Metacarpals - Phalanges • Lower leg and foot <ul style="list-style-type: none"> - Patella - Tibia - Fibula - Tarsals - Metatarsals - Phalanges 		

3.3. Identify the arches of the foot	<ul style="list-style-type: none"> • Where they are found 		
3.4. State the types of joint	<ul style="list-style-type: none"> • Ball and socket • Hinge • Pivot • Gliding • Saddle 		
3.5. State the range of joint movements	<ul style="list-style-type: none"> • Fixed • Slightly moveable • Freely moveable 		
3.6. Describe the diseases and disorders of the skeletal system	<ul style="list-style-type: none"> • Arthritis: <ul style="list-style-type: none"> - Osteo and Rheumatoid • Gout • Hallux Valgus • Osteoporosis • Stress 		

LO4 Know the structure, function and pathologies of the muscular system			
4.1. Identify the location of the muscles of the head, face, neck, shoulders, arms, hands, lower leg and foot	<ul style="list-style-type: none"> • Face, neck and scalp <ul style="list-style-type: none"> - Orbicularis oculi - Orbicularis oris - Masseter - Buccinator - Levator anguli oris - Levator labii superioris - Depressor anguli oris - Depressor labii inferioris - Mentalis - Zygomaticus - Temporalis - Nasalis - Procerous - Corrugator - Frontalis - Occipitalis - Risorius - Trapezius - Platysma • Muscles of the upper trunk/torso 	<ul style="list-style-type: none"> • OHP/Whiteboard • PowerPoint • VLE • Activities • Lecture • Q&A • Handout • Homework • Test 	9

	<ul style="list-style-type: none"> - Trapezius - Sternocleidomastoid - Splenius capitis - Deltoids - Pectoralis • Lower arm and hand <ul style="list-style-type: none"> - Supinator radii brevis - Flexors of lower arm and hand - Extensors of lower arm and hand • Lower leg and foot <ul style="list-style-type: none"> - Gastrocnemius - Soleus - Tibialis anterior - Peroneus longus - Flexors of lower leg and foot - Extensors of lower leg and foot - Achilles tendon 		
4.2. Describe the actions of the muscles of the head, face, neck, shoulders, arms, hands, lower leg and foot	<ul style="list-style-type: none"> • Flexion • Extension • Adduction • Abduction • Circumduction • Rotation • Pronation • Supination • Dorsiflexion • Plantarflexion • Eversion • Inversion 		
4.3. State the different types of muscle contraction	<ul style="list-style-type: none"> • Concentric • Eccentric • Isometric 		
4.4. Describe the diseases and disorders of the muscular system	<ul style="list-style-type: none"> • Cramp • Repetitive Strain Injury (RSI) • Muscle fatigue • Muscle strain • Stress 		

LO5 Know the structure, function and pathologies of the nervous system			
5.1. State the structure and function of the nervous system	<ul style="list-style-type: none"> • Axon • Dendrites • Cell body • Myelin sheath • Motor • Mixed nerves • Sensory • Central Nervous System (CNS) • Peripheral Nervous System (PNS) • Autonomic Nervous System (ANS) • Detection, interpretation and response to stimuli • Brain <ul style="list-style-type: none"> - Meninges - Cerebrospinal fluid - Cerebrum - Cerebellum - Pons varolii - Medulla Oblongata - Hypothalamus - Brain stem • 5th (Trigeminal), 7th (Facial) and 11th (Accessory) cranial nerves 	<ul style="list-style-type: none"> • OHP/Whiteboard • PowerPoint • VLE • Activities • Lecture • Q&A • Handout • Homework • Test 	9
5.2. Describe the diseases and disorders of the nervous system	<ul style="list-style-type: none"> • Neuritis • Bell's palsy • Epilepsy • Neuralgia • Parkinson's disease • Stress • Myalgic encephalomyelitis (ME) • Cerebral palsy • Multiple sclerosis • Sciatica • Motor neurone disease • Dementia 		

LO6 Know the structure, function and pathologies of the endocrine system			
6.1. State the functions of the endocrine system	<ul style="list-style-type: none"> • Hormone secretion • Homeostasis 	<ul style="list-style-type: none"> • OHP/whiteboard • PowerPoint 	9

	<ul style="list-style-type: none"> Control of body functions 	<ul style="list-style-type: none"> VLE Activities Lecture Q&A Handout Homework Test 	
6.2. State the position and function of the endocrine glands	<ul style="list-style-type: none"> Pituitary Thyroid gland Parathyroids Thymus Pineal Pancreas Adrenals Ovaries Testes 		
6.3. Describe the diseases and disorders of the endocrine system	<ul style="list-style-type: none"> Addison's syndrome Amenorrhoea Cushing's syndrome Pre-menstrual syndrome Polycystic ovarian syndrome Stress Diabetes mellitus Diabetes insipidus Endometriosis 		

LO7 Know the structure, function and pathologies of the respiratory system			
7.1. State the structure and function of the respiratory system	<ul style="list-style-type: none"> Nose Nasal cavity Larynx Pharynx Trachea Bronchi Bronchioles Alveoli Lungs Pleura (visceral, parietal, pleural cavity) Diaphragm Intercostals 	<ul style="list-style-type: none"> OHP/whiteboard Powerpoint VLE Activities Lecture Q&A Handout Homework Test 	9
7.2. State the difference between internal and external respiration	<ul style="list-style-type: none"> Internal respiration External respiration 		

7.3. Describe the diseases and disorders of the respiratory system	<ul style="list-style-type: none"> • Bronchitis • Emphysema • Pleurisy • Pneumonia • Asthma • Hay Fever • Sinusitis • Influenza • Laryngitis • Hyperventilation 		
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LO8 Know the structure, function and pathologies of the cardiovascular system			
8.1. State the structure and functions of the cardiovascular system	<ul style="list-style-type: none"> • Arteries • Arterioles • Veins • Venules • Capillaries • Blood plasma • Erythrocytes • Leucocytes • Platelets • Thrombocytes • Platelets • Thrombocytes • Transportation • Protection • Regulation of body temperature 	<ul style="list-style-type: none"> • OHP/whiteboard • PowerPoint • VLE • Activities • Lecture • Q&A • Handout • Homework • Test 	9
8.2. State the composition and functions of the blood	<ul style="list-style-type: none"> • Erythrocytes • Leucocytes • Thrombocytes (Platelets) • Plasma and plasma proteins 		
8.3. State the primary vessels in the head, face, neck, hand, wrist, forearm, foot, ankle and lower leg	<ul style="list-style-type: none"> • Main arteries of the head and neck <ul style="list-style-type: none"> - Thyroid - Facial - Temporal - Lingual - Occipital - Maxillary 		

	<ul style="list-style-type: none"> • Main veins of the head and neck <ul style="list-style-type: none"> - Middle Temporal - Superficial Temporal - Maxillary - Anterior Facial - Common Facial - Internal Jugular - External Jugular • Arteries of the lower arm and hand <ul style="list-style-type: none"> - Radial - Ulnar • Veins of the lower arm and hand <ul style="list-style-type: none"> - Basilic - Cephalic • Arteries of the lower leg and foot <ul style="list-style-type: none"> - Anterior tibial - Posterior tibial • Veins of the lower leg and foot <ul style="list-style-type: none"> - Anterior tibial - Posterior tibial 		
8.4. Describe the diseases and disorders of the cardiovascular system	<ul style="list-style-type: none"> • Anaemia • Aneurysm • Arteriosclerosis • Atherosclerosis • Coronary thrombosis • Haemorrhoids • Haemophilia • Hepatitis A, B & C • High blood pressure (hypertension) • High cholesterol • HIV/AIDS • Leukaemia • Low blood pressure (hypotension) • Nosebleeds • Palpitations • Phlebitis • Septicaemia • Stress • Deep vein thrombosis • Varicose veins 		

LO9 Know the structure, function and pathologies of the lymphatic system			
9.1. State the function of the lymphatic system	<ul style="list-style-type: none"> • Transportation • Purification • Protection 	<ul style="list-style-type: none"> • OHP/whiteboard • Powerpoint • VLE • Activities • Lecture • Q&A • Homework • Test 	9
9.2. State the structure of the lymphatic system	<ul style="list-style-type: none"> • Lymphocyte • Lymphatic capillary • Lymphatic vessel • Lymph node • Lymphatic duct • Lymphatic tissue 		
9.3. State the location of the major lymphatic nodes in the head, face, neck, hand, wrist, forearm, foot, ankle and lower leg	<ul style="list-style-type: none"> • Deep and Superficial Cervical • Submandibular • Submental • Anterior and Posterior Auricular • Occipital • Buccal • Axillary • Supratrochlear • Popliteal 		
9.4. Describe the diseases and disorders of the lymphatic system	<ul style="list-style-type: none"> • Cellulitis • Oedema/water retention • Hodgkin's disease • Lymphoedema • Cancer 		

LO10 Know the structure, function and pathologies of the other systems of the body			
10.1. State the structure and function of the digestive system	<ul style="list-style-type: none"> • Alimentary canal • Salivary glands • Tongue • Epiglottis • Oesophagus • Stomach • Small intestine • Appendix • Large intestine • Rectum 	<ul style="list-style-type: none"> • OHP/whiteboard • Powerpoint • VLE • Activities • Lecture • Q&A • Homework • Test 	9

	<ul style="list-style-type: none"> • Anus • Accessory organs • Liver • Gall bladder • Pancreas • Peristalsis • Ingestion • Digestion • Absorption • Defecation 		
10.2. Describe the diseases and disorders of the digestive system	<ul style="list-style-type: none"> • Appendicitis • Cirrhosis of the liver • Jaundice • Heartburn • Irritable Bowel Syndrome (IBS) • Ulcer • Hernia • Stress • Anorexia nervosa • Bulimia nervosa • Constipation • Gall stones • Diabetes mellitus • Coeliac's disease 		
10.3. State the structure and function of the urinary system	<ul style="list-style-type: none"> • Kidney • Pelvis • Ureter • Bladder • Urethra • Filtration • Re-absorption • Secretion/micturition 		
10.4. Describe the diseases and disorders of the urinary system	<ul style="list-style-type: none"> • Cystitis • Kidney stones • Nephritis • Diabetes insipidus 		

10.5. State the structure and function of the reproductive system	<ul style="list-style-type: none"> • Prostate • Testes • Testicular vessels • Penis • Scrotum • Uterus • Fallopian tubes • Cervix • Ovary • Vagina • Labia • Reproduction 		
10.6. Describe the diseases and disorders of the reproductive system	<ul style="list-style-type: none"> • Ectopic pregnancy • Amenorrhoea • Dysmenorrhoea • Pre-menstrual syndrome • Polycystic ovarian syndrome • Endometriosis • Mastitis • Sexually transmitted diseases • Testicular cancer • Prostate cancer 		

Document History

Version	Issue Date	Changes	Role
v1	09/10/2019	First published	Qualifications and Regulation Co-ordinator
v2	11/2/2020	Updated to match Unit Specification	Qualifications Administrator