iUSP151 – Conducting subjective and objective assessment

URN – R/617/5625

Guided Learning Hours: 50

Learning outcome	Assessment criteria	Taught content to include
LO1 Understand the anatomy and physiology of the major joints of the body	1.1. Identify bony structures associated with the major joints	• Ankle and foot - Joint line (margin) ▪ Talocrural - Landmarks ▪ Medial/lateral malleolus - Sustentaculum tali - Peroneal tubercle - Navicular tubercle - Talar dome - Tarsals - Metatarsals - Phalanges • Knee and lower leg - Joint line (margin) ▪ Tibial plateau ▪ Medial and lateral joint margins - Landmarks ▪ Superior pole of patella - Inferior pole of patella - Lateral and medial femoral condyle - Tibial tuberosity - Anterior tibial border - Lateral and medial femoral epicondyle - Adductor tubercle - Head of fibula - Pes anserinus • Hip and thigh

		- Joint line (margin) ▪ Femoroacetabular - Sacroiliac - Landmarks ▪ Iliac crest - Anterior superior iliac spine - Anterior inferior iliac spine - Posterior superior iliac spine - Pubic tubercles - Ischial tuberosity - Greater and lesser trochanters of femur - Shaft of femur • Shoulder - Joint line (margins) ▪ Glenohumeral - Acromioclavicular - Sternoclavicular - Landmarks ▪ Clavicle - Scapula ▪ Spine of scapula ▪ Acromion process ▪ Inferior angle ▪ Medial and lateral scapular borders - Coracoid process - Greater tubercle - Lesser tubercle - Bicipital (intertubercular) groove • Elbow - Joint line (margins) ▪ Radio-ulnar - Humeroulnar - Humeroradial - Landmarks ▪ Lateral and medial epicondyle - Head of radius - Olecranon process • Wrist/hand - Joint lines (margins)

		▪ Radiocarpal - Landmarks ▪ Radial and ulnar styloid processes - Carpals - Metacarpals - Phalanges • Spine/head - Joint line ▪ Sacroiliac joint - Spinous process of C2, C7, T3, T7, L4 - Sacrum - Occipital process - Mastoid process
	1.2. Explain the functions of bony structures associated with the major joints	• Support • Protection • Assisting in movement • Storage of minerals • Production of blood cells • Storage of chemical energy
	1.3. Identify soft tissue structures located at the major joints	• Ankle and foot - Soft tissue – Anterior talofibular ligament - Calcaneofibular ligament - Posterior talofibular ligament - Achilles tendon - Deltoid (medial) ligament - Plantar fascia - Bursae – Achilles (superficial and deep) - Interosseous membrane - Retinacula (superior/inferior extensor, lateral and posterior) • Knee - Soft tissue – lateral collateral ligament - Medial collateral ligament - Patellar tendon - Medial and lateral menisci - Bursae (popliteal, pre-patella, supra-patella, superficial and deep infra-patella, pes anserine) • Hip - Soft tissue – Bursae (superficial and deep trochanteric, ischial)

		- Ligaments (ischiofemoral, iliofemoral, pubofemoral, head of femur, transverse ligament) - Labrum - Sciatic nerve - Femoral nerve - Obturator nerve • Shoulder - Soft tissue – Acromioclavicular ligaments - Coracoclavicular ligament - Coracoacromial ligament - Sternoclavicular ligaments - Glenohumeral ligaments - Costoclavicular ligament - Interclavicular ligament - Bursae (sub-deltoid, sub-acromial) - Biceps tendon - Glenoid labrum - Brachial plexus • Elbow - Soft tissue – Lateral and medial collateral ligaments - Annular ligament - Bursa (olecranon) - Interosseous membrane • Wrist/hand - Soft tissue – Radial/ulnar collateral ligaments - Radiocarpal/ulnocarpal ligaments - Interosseous membrane - Carpal tunnel - Tunnel of Guyon - Ulnar nerve - Medial nerve - Radial nerve - Retinaculum (flexor) • Spine/head - Soft tissue – Ligaments - Supraspinous - Interspinous - Inter-traverse - Anterior longitudinal

		- Posterior longitudinal - Ligamentum flavum - Ligamentum nuchae - Sub-occipital - Sacrospinous - Sacrotuberous - Iliolumbar - Sciatic nerve - Sacral/lumbar plexus
	1.4. Explain the function of soft tissue structures located at the major joints	• Tendons • Tendon sheaths • Ligaments • Capsule • Synovial membrane • Bursae • Nerves • Receptors • Blood vessels
	1.5. Explain the different types of joint-end feel	• Bone on bone • Muscle spasm • Capsular • Spongy block • Tissue approximation • Empty • Ease • Bind • Hard • Soft

LO2 Understand the influences and effects of client information on treatment planning	2.1. Explain factors which may predispose clients to injury and dysfunction	• Lifestyle • Age • Diet • Previous injury • Levels of activity • Stress • Rest • Gender

		• Body composition • Anatomy • Occupation
	2.2. Explain how factors may influence a client's ability to recover from injury	• Misdiagnosis • Underlying medical condition • Poor circulation • Age • Diet • Lifestyle • Treatment strategies • Rest • Acute/chronic conditions • Severity of injury • Stress • Non-compliance
	2.3. Give examples of how subjective information may influence treatment planning	• Observations • History of present condition • Body chart • Behavioural symptoms • Past medical history • Social/family history • Past surgery • History • Lifestyle • Age • Diet • Gender • PARQ • Screening forms
	2.4. Identify reasons for treatment deferral and referral	• Deferral (postponing or restricting intervention) - Acute inflammation - Referral of treatment - Contra-indications/contra-actions • Referral (beyond therapist's remit) - Red and yellow flags - Fractures/breaks - Haematomas

		- Ruptures - Dislocations - Anything that is not soft tissue damage - Treatment is not working or results are unpredictable - Contra-indications/contra-actions - Outside scope of practice • Contra-indications that require medical permission - Pregnancy - Cardiovascular conditions (thrombosis, phlebitis, hypertension, hypotension, heart conditions) - Haemophilia - Any condition already being treated by a GP or another health professional, e.g., physiotherapist, osteopath, chiropractor, coach - Medical oedema - Osteoporosis - Arthritis - Nervous/psychotic conditions - Epilepsy - Recent operations - Diabetes - Asthma - Any dysfunction of the nervous system (e.g., Muscular sclerosis, Parkinson's disease, Motor neurone disease) - Bell's palsy - Trapped/pinched nerve (e.g., sciatica) - Inflamed nerve - Cancer - Postural deformities - Spastic conditions - Kidney infections - Whiplash - Slipped disc - Undiagnosed pain - When taking prescribed medication - Acute rheumatism • Contra-indications that restrict treatment - Fever - Contagious or infectious diseases

		- Under the influence of recreational drugs or alcohol - Diarrhoea and vomiting - Skin diseases - Undiagnosed lumps and bumps - Localised swelling - Inflammation - Varicose veins - Pregnancy (abdomen) - Cuts - Bruises - Abrasions - Scar tissue (2 years for major operation and 6 months for a small scar) - Sunburn - Hormonal implants - Abdomen (first few days of menstruation depending how the client feels) - Haematoma - Hernia - Recent fractures (minimum 3 months) - Cervical spondylitis - Gastric ulcers - After a heavy meal

LO3 Understand the effects of anatomy, physiology and pathology on human function	3.1. Describe the characteristics of common postural types	• Centre of gravity (lateral) • Upper and lower cross syndrome • Scoliosis • Hyper and hypo lordosis • Hyper and hypo kyphosis • Sway back • Neutral spine • Military • Slumped • Flat back • Dowager's hump • Posterior, anterior lateral pelvic tilt and rotations • Sports specific postures

	3.2. Explain the effects of postural deviations	• Compensatory somatic patterns • Physiological effects • Psychological effects • Effects on performance (negative/positive) • Increased susceptibility to injury
	3.3. Describe the pathophysiology of common injuries/soft tissue dysfunction	• Pathophysiology of ankle/foot - Achilles rupture - Achilles tendinopathy - Calcaneal bursitis - Plantar fasciopathy - ATFL sprain • Pathophysiology of leg - Shin splints (Medial tibial stress syndrome / compartment syndrome) • Pathophysiology of knee - Runners knee (ITB syndrome) - Pes anserine bursitis - Osgood Schlatter's disease - Patella bursitis (pre, supra, infra) - Imbalance VMO and vastus lateralis - patella mal-tracking - Jumpers knee (patella tendinopathy) • Pathophysiology of hip - Trendelenburg (hip abductor weakness / gluteal tendinopathy) - Piriformis syndrome - Trochanteric bursitis - Myositis ossificans • Pathophysiology of shoulder - Sub-acromial pain syndrome (impingement) - Supraspinatus tendinopathy - Supraspinatus strain - Long head of biceps tendinopathy - Clavicle fracture • Pathophysiology of elbow - Medial epicondylitis - Lateral epicondylitis - Olecranon bursitis

		• Pathophysiology of wrist and hand - Fractures (distal radius & ulna / scaphoid) - Carpel tunnel syndrome - Mallet finger - De Quervain's disease • Pathophysiology of back and neck - Vertebral fracture - Herniated disc - Facet joint lock - Rib fracture
	3.4. Explain how the ageing process affects the musculoskeletal systems	• Atrophy • Sarcopenia • Arthritis (Mono articular) • Gout • Rheumatoid arthritis • Osteoporosis • Osteoarthritis • Yellow cartilage • Wear and tear • Yellow marrow • Calcium loss • Postural deformity • Decrease in bone density • Decrease in joint range of movement • Instability • Increased risk of injury

LO4 Understand the principles and practice of objective assessment techniques	4.1. Explain the methods and purpose for a range of objective assessment techniques: • Asymmetry • Palpation • Range of movement (Active, passive, resisted) • Postural analysis • Functional tests • Special tests	• Asymmetry • Palpation • Postural analysis • Active • Passive • Resisted • Range of movement (active, passive, resistive) • Functional tests (sit to stand, walking, squat, lunge) • Orthopaedic tests (for the purpose of identifying musculoskeletal length, injury or imbalance and to rule out fractures)

		• Gait analysis • Ankle - Thompson squeeze – Achilles - Calf length test (knee to wall) • Knee - Lateral pull test (patella maltracking) - Modified Ober's test – ITB - Patella sweep (effusion) oedema - Thomas test/modified - Noble test • Hip - Trendelenburg - Thomas test - Leg length (true and apparent) - Modified Ober's test - Piriformis length test (modified Craig's sign) • Shoulder - Painful arc test - Empty can test - Apley's scratch test - Speed's test - Neer's test - Impingement relief test - Gerber's lift off sign - Hawkins Kennedy test • Elbow - Mill's test - Cozen's sign - Tennis elbow test • Wrist and hand - Scaphoid load test - Mallet finger test - Finkelstein test - Phalen's test - Reverse Phalen's test • Back conditions - The straight legged and/or slump can be used prior to massage treatment as safety checks for learners. Clients should be referred if the tests are positive

	4.2. Explain how to interpret findings for each objective assessment technique	• Positive tests • Partial positive • Range of movements • Negative tests • Speed of movement • Sign and symptoms
	4.3. Critically evaluate the range of objective assessment methods used to gather information	• Practical/observation • Consultation • Theory/underpinning knowledge • Observations • Testing for fitness • Posture and figure analysis • Range of movement • Active and passive • Muscle length test • Ligament instability tests • Specialist tests • Functional tests • Orthopaedic tests • Palpation and physical examination • Treatment strategy • Advice and guidance

LO5 Be able to conduct subjective and objective assessment	5.1. Carry out subjective assessments of clients	• Client's personal and medical details • Medical history previous and present • Contra-indications requiring medical permission • Type and level of pain
	5.2. Obtain consent for objective assessments	• Personal or written permission from the parent/guardian/carer is recommended if treating a client under 16 years of age • From a guardian/carer if a client is too ill to consent themselves • Having a chaperone present if necessary • Organisational procedures and policies regarding approved guidelines for the presence of a chaperone • Permission from a GP if the client is taking medication or contra-indicated in any way • Adequate disclosure of information: e.g., nature and purpose of treatment, its risk and consequences, alternative course of treatment • Competency • Welfare of client • Capacity for decision making • Client choice • Good practice • Ethical principles • Code of conduct • Integrity • Respect • Professionalism • Consultation form (an example of a consultation form can be downloaded from www.itecworld.co.uk) • Client signature
	5.3. Carry out objective assessments of clients	• Private comfortable area • Positive body language • Positioning of the client (no barriers between themselves and client) • Good communication skills (asking open and/or closed questions where appropriate) • Trust • Professionalism, confidence, and enthusiasm • Confidentiality

		• Contra-indications to treatment • Client profile • Importance of planning a treatment programme bearing in mind the client's religious, moral and social beliefs • Determining the nature and extent of the client's needs • Agreement to the course of action • Ascertaining the client's consent to the treatment, (where the client is not in a position themselves ascertaining from the appropriate companion agreement to the treatment) • Explanation of any possible side effects • Explanation of how the programme will be evaluated and the review process • Where appropriate clarify with the client any information that may be available to others e.g., relevant health care workers • Obtain the client's signature (or that of the companion) • Completion of consultation form (an example of a consultation form can be found at www.itecworld.co.uk) • Physical examination to include: - Ankle - Knee - Hip - Shoulder - Elbow - Wrist/hand - Spine (active only) - Major muscle groups - Upper and lower cross syndromes - Sports specific postures - Palpation of joint - Bony landmarks - Joint lines - Muscles - Ligaments - Bursa - Observation of joint - Active range of movement (ROM) - Passive range of movement (excluding spine) - Active resisted muscle testing (muscle loading or mid muscle length isometric strength testing)

		- Orthopaedic tests
	5.4. Record client information in accordance with professional practice requirements	• Consultation form • Medical history • Contra-indications • Area(s) to be treated • Type of injury • Treatment plan • Home care advice • Client signature
	5.5. Store client's information as legally required	• Data Protection Act/GDPR • Legislation • Security • Organisation's standards and procedures

LO6 Be able to devise a sport massage treatment plan	6.1. Devise treatment plan	• Indications for massage • Adapting the treatment to meet the needs of the client • Soft tissue techniques • Aftercare/home care advice
	6.2. Explain rationale for chosen massage interventions	• Aims and objectives • Procedures • Techniques • Adaptations
	6.3. Present massage interventions and rationale to client	• Nature • Purpose • Process
	6.4. Obtain consent for treatment	• Personal or written permission from the parent/guardian/carer is recommended if treating a client under 16 years of age • From a guardian/carer if a client is too ill to consent themselves • Having a chaperone present if necessary • Organisational procedures and policies regarding approved guidelines for the presence of a chaperone • From a GP if the client is taking medication or contra-indicated in any way • Adequate disclosure of information: e.g., nature and purpose of treatment, its risk and consequences, alternative course of treatment

		• Competency • Welfare of client • Capacity for decision making • Client choice • Good practice • Ethical principles • Code of conduct • Integrity • Respect • Professionalism • Consultation form (an example of a consultation form can be downloaded from www.itecworld.co.uk) • Client signature

Assessment	
Portfolio of evidence containing: • 5 treatment evidence	Assessments must be carried out on a minimum of 5 clients to cover all joints of the body. Consultation forms can be downloaded from www.itecworld.co.uk.

Guide to taught content
The content contained within the unit specification is not prescriptive or exhaustive but is intended to provide helpful guidance to teachers and learners with the key areas that will be covered within the unit, and, relating to the kinds of evidence that should be provided for each assessment objective specific to the unit learning outcomes.

Document History

Version	Issue Date	Changes	Role
v1	16/08/2019	First published	Qualifications and Regulation Co-ordinator