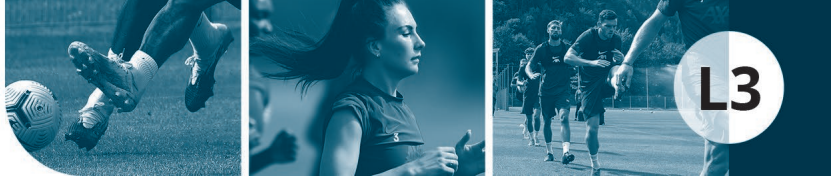
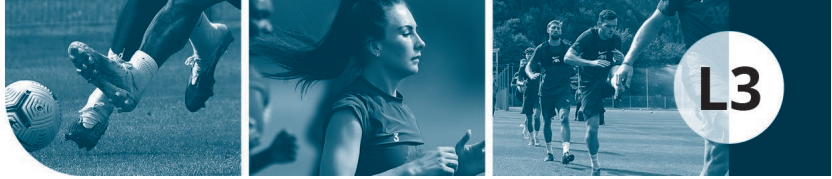
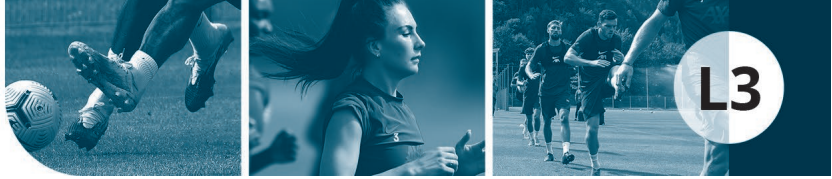


Unit title	Unit 7: Personal Training and Programming
Guided learning hours	180
Number of lessons	90
Duration of lessons	2 hours
Links to other units	
• Unit 2: Health, Wellbeing and Sport • Unit 6: Exercise and Fitness Skills Development • Unit 8: Anatomy and Physiology for Exercise and Physical Activity • Unit 9: Nutrition for Physical Activity and Exercise • Unit 15: Developing coaching skills • Unit 17: Inclusive coaching • Unit 18: Sport and Leisure Facilities Management • Unit 19: Sport and Leisure Facility Operations • Unit 34: Sports Development	

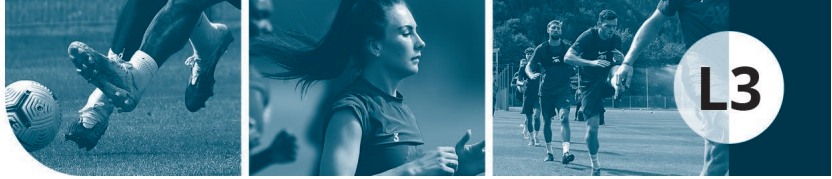
Key to learning opportunities			
AW	Assignment writing	**RS**	Revision session
GS	Guest speaker	**V**	Visit
IS	Independent study	**GW**	Group work



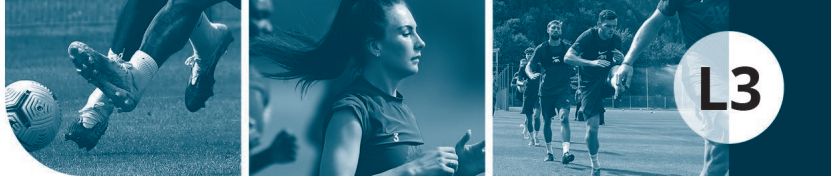
Lesson	Topic	Lesson type	Suggested activities	Resources
Learning aim A: Explore anatomy, physiology and biomechanics for personal training				
1 – 2	Introduction to the unit	GW / GS	• **Tutor presentation:** outline the nature of the learning aims and the assessment task that learners will be expected to complete, using the specification, ensuring they understand relevant key terms. Invite the learners to share their experiences (if any) of personal training. • **Tutor presentation:** introduce learners to the reasons for a guest speaker(s) and guide them on what they need to find out from them. • **Paired activity:** ask learners to research online personal trainers. What do they notice about their platforms and marketing? • **Guest speaker(s):** provides insight into their work as a personal trainer, the journey to becoming one and the types of client they work with. Learners encouraged to ask all questions and make comparisons with their research. • **Plenary:** pairs to build a list of qualities they believe important for a personal trainer. This are set aside and revisited at the end of the unit.	Access to a gym facility
3–5	**A1** Musculoskeletal system - Bones of the axial and appendicular skeleton - Types of structure of synovial joints	GW / IS	• **Tutor presentation:** introduction to the learning aim and brief descriptions of the body systems to be covered and why. • **Small group activity:** learners use Post it notes or labels to locate the major bones of the axial and appendicular skeletons and synovial joints on a life size skeleton, poster or each other. • **Individual activity:** they check their locations against correct labels in the textbook or websites and complete their own diagram of: - major bones	Life size skeleton or skeleton wall Post it notes/labels Images of gym-based exercise Online quizzes



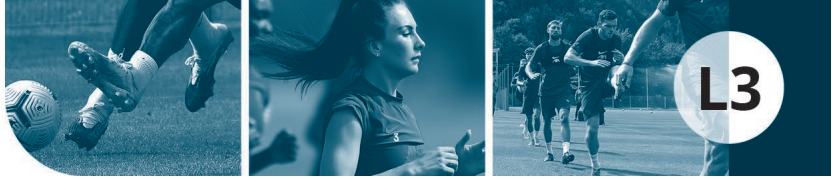
Lesson	Topic	Lesson type	Suggested activities	Resources
			- axial and appendicular skeleton, using colour coding - location and names of synovial joints. • **Plenary:** tutor allocates a type of gym-based exercise to each learner and they are asked to find a suitable image ready for annotations. • **Pair activity:** using the labels on the diagram in a standing anatomical position, learners apply the accurate annotations of bones and joints being used in the allocated gym exercise. These are gallerised. • **Plenary:** quiz as a formative assessment activity to show secure knowledge of bone and joint locations.	
6–7	**A1** Musculoskeletal system - Location of muscles	GW / IS	• **Tutor presentation:** learners are reminded of the types of muscle in the human body and guided, using an image of a skeletal muscle, to the connective tissue within it. • **Small group activity:** learners use Post it notes or labels to repeat the activity and locate the muscles as listed in the unit content. • **Individual activity:** they check their locations against correct labels in the textbook or websites and complete their own diagram of: - muscles - which muscle group they belong to. • **Pair activity:** using the labels on the diagram in a standing anatomical position, learners apply the accurate annotations of muscles being used in the same allocated gym exercise. These are re-gallerised. • **Plenary:** quiz as a formative assessment activity to show secure knowledge of muscle groups.	Printed image of a skeletal muscle Life size muscle wall Anterior and posterior muscle charts Post it notes/labels Online quizzes



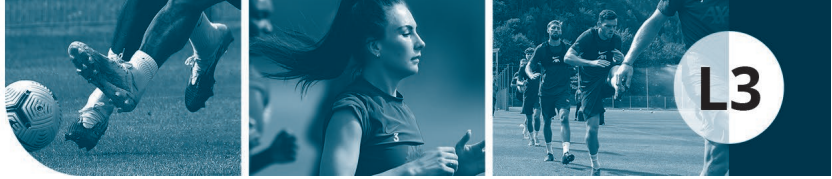
Lesson	Topic	Lesson type	Suggested activities	Resources
8	**A1** Musculoskeletal system - Structure of bones - Bone growth - Joint stability	GW / IS	• **Tutor presentation:** images of bone(s) used to emphasise the structure of a bone, the process of bone growth and how joints are kept stable. • **Individual activity:** learner led labelling of the structures within a long bone. • **Paired activity:** imagine they are working with an older client and complete a role-play activity to able to explain the process of bone remodelling and how it is impacted by the ageing process and exercise. • **Plenary:** flipped learning. Research the terms using to describe anatomical movement at joints.	Long bone images Role-play cards
9–11	**A1** Musculoskeletal system - Movement available at joints	GW	• **Whole-class discussions:** learner feed back on their flipped learning about movement terms. • **Tutor presentation:** formal presentation about the movements using 3D images and animations, plus relevant sporting examples. • **Small-group activities:** - Learners capture themselves completing body weight exercises such as a squat, a press-up, a burpee, or a lunge etc. (Aim to cover as many exercises as possible.) - Upload the video into a slow-motion app to prepare the exercise for analysis. - Divide the movement into two stages, e.g. upwards and downwards phase. - With tutor support, create a table to record an analysis of the movement. This will initially need to have columns including: o joint o name of the joint	Sport image cards Exercise cards/posters A device to video Slow motion app access e.g. coaches eye Online quizzes



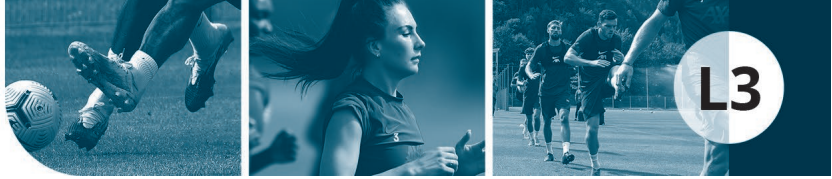
Lesson	Topic	Lesson type	Suggested activities	Resources
			○ movement with description. - Ensure learners are aware this table will be added to with analysis of muscles. • **Plenary:** quiz or 'Simon says' game as a formative assessment activity to show secure knowledge of the movements available at joints.	
12–13	**A1** Musculoskeletal system - Muscle actions - Origins and insertions - Role of muscles	GW / RS	• **Tutor presentation:** on the purpose of an origin and insertion and why these are important when a personal trainer is making a visual assessment of a movement. Recapping the terms agonist, antagonist, synergist and fixator. Tutor models a body weight exercise that has been fully labelled and analysed (WAGOLL). • **Small-group activities:** - Learners use the WAGOLL and return to their body weight image and add the correct annotations, showing which muscle is acting as the agonist, antagonist, synergist and fixator. - They can use textbooks and the internet to find the correct information. The agonist muscle also needs to show the origin and insertion. - Table is developed to also show this information. • **Marketplace:** bodyweight images are made visual and the group move round the room to process the different annotations. • **Small group activity:** prepare three questions about your image • **Plenary:** tutor collates the questions and assesses the group on their application of knowledge of a variety of typical gym-based exercises.	WAGOLL (What a good one looks like) – a fully annotated body weight image Body weight images Collection box for questions
14–15	**A1** Musculoskeletal system	GW	• **Tutor presentation:** principle of muscle contraction delivered through the neuromuscular system. Learners to be introduced to	Patella hammer PNF guidance



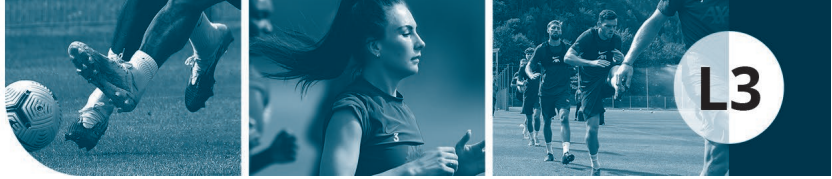
Lesson	Topic	Lesson type	Suggested activities	Resources
	A4 Nervous system (**C4 –** Proprioceptive Neuromuscular Facilitation PNF)		the role of central nervous system, motor units and motor unit recruitment. • **Paired practical activity:** learners complete the stretch reflex (patella hammer) experiment to visualise proprioception. • **Tutor presentation:** demonstrates and uses video guidance of completing the hamstring (PNF stretch). • **Paired practical activity:** learners complete a thorough warm-up and have a go at PNF. Once completed they make notes on the methodology of PNF and, with tutor support, add relevant information about muscle spindles and Golgi tendon organs.	Mats
16–17	**A1** Musculoskeletal system - Sliding filament theory	IS	• **Tutor presentation:** using animations of muscle contraction, the tutor divides the sliding filament theory into five sections. • **Individual activity:** learner uses screenshots from the animations and creates a comic strip/timeline of events that occur within the theory to allow muscle contraction. • **Plenary:** mix and match activity of the key terms linked to the sliding filament theory.	Sliding filament theory animations Comic strip templates Images of a relaxed and contracted muscle Mix and match of key terms activity
18	**A1** Musculoskeletal system **A4** Nervous system	GS / RS / IS	• **Guest speaker:** invite a physiotherapist to speak with learners and reinforce the anatomical and physiological learning, but also to share their experience of the effect weight and non-weight bearing exercise has on the musculoskeletal and nervous systems. Observe a postural assessment (learning aim B). • **Individual activity:** learners create posters to demonstrate understanding of the effects of exercise.	A3 / A2 paper
19	**A2** Cardiorespiratory system	IS	• **Tutor presentation:** use animations of an increase in breathing associated with exercise to identify the key components of the	Breathing animations Images of the



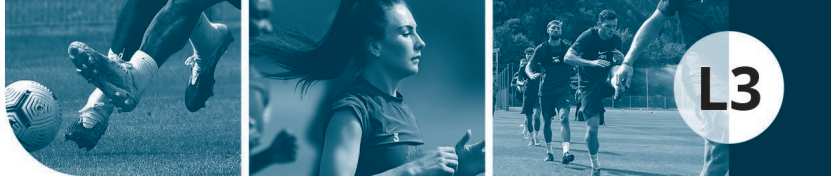
Lesson	Topic	Lesson type	Suggested activities	Resources
	- The respiratory system - Blood vessels		respiratory system. Revisit previous unit work on the structure and functions of blood vessels. • **Individual activity:** learners add labels to an image of the thorax with relevant descriptions and tabulate the key features of arteries, arterioles, capillaries, venules and veins. • **Plenary:** quiz as a formative assessment activity to show secure knowledge of respiratory system and blood vessels.	respiratory system Blood vessel images Online quizzes
20–22	**A2** Cardiorespiratory system - Cardiac output - Stroke volume - Blood pressure - The effects of exercise on the cardiorespiratory system	GW / IS	• **Tutor presentation:** explanation of the sub maximal rowing (or alternative continuous form of exercise) experiment. • **Group activity:** in small groups of four, learners allocate roles (participant, timer, recorder, leader/screening) and ensure the appropriate paperwork and equipment is in place. They check all the correct methodology. - Pre-test measurements are recorded. - Group independently organises the experiment and sets off the participant on a 12-minute continuous row at a low to moderate intensity. - Heart rate and RPE are taken and recorded every minute. - Post-test measurements are recorded. • **Individual activity:** interpretation of data collected, and learners create graphs on heart rate, RPE, blood pressure and flexibility in preparation for data analysis. • **Tutor presentation:** tutor uses the data and graphs to confirm knowledge of cardiac output, stroke volume, blood pressure and the effects the row (aerobic exercise) had on the cardiorespiratory system. • **Plenary:** learners add this into a conclusion report.	Rowing machine Heart rate monitors Devices to time Graph paper Borg RPE scale Sit and reach box / equipment Blood pressure monitor



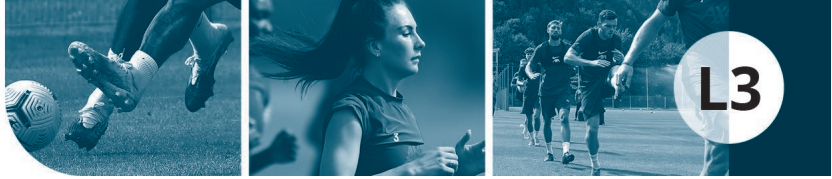
Lesson	Topic	Lesson type	Suggested activities	Resources
23	**A3** Energy systems - Breakdown of ATP - The phosphocreatine system	GW	• **Whole group discussion:** if relevant, learners share what they remember from learning aim D of Unit 8. • **Tutor presentation:** tutor uses and moves the equipment to remind learners about the process of the breakdown of ATP and how the phosphocreatine system is the first system used to resynthesise ATP. • **Group activity:** learners use the equipment and practise moving the equipment whilst verbalising the process. • **Plenary:** this is videoed as a formative assessment activity.	Bottle tops/cones Straws/relay batons Device for videoing
24–25	**A3** Energy systems - Lactate system - Aerobic energy system - Energy system continuum	GW / IS	• **Tutor presentation:** formal delivery of the process of each system using laminated key words cards. • **Group activity:** learners use the cards and verbalise the process. • **Individual activity:** learners ensure notes are up to date by having the relevant diagrams and explanations of each energy system. • **Individual activity:** using images of sports or forms of exercise, learners are asked to place them next to a title card of each energy system. Tutor support on focusing on intensity and duration is key. • **Tutor presentation:** tutor then supports the learner to move the images onto a continuum and explain the theory around the energy system continuum. • **Plenary:** learners have ABC cards to represent each energy system. When an image is displayed, they show the energy system that is most dominant.	Lactate key word process cards Aerobic energy system key word cards Laminated sport images or random sport generator ABC plenary cards
26	**A5** Endocrine system	IS / GW	• **Tutor presentation:** introduction to the system and allocate learners a hormone and/or a gland from the unit content. • **Individual research:** learners research the location and function of the hormone/gland and its link to exercise.	Access to computers and the internet for research



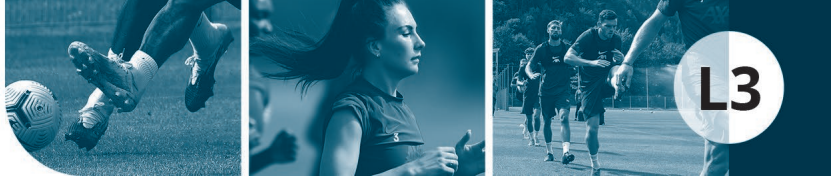
Lesson	Topic	Lesson type	Suggested activities	Resources
			• **Marketplace learning:** research is shared in the structure of a marketplace. Learners allocated an amount of time at each 'stall' to make relevant notes on each aspect of the endocrine system. • **Plenary:** research the signs and symptoms you would find in an individual if they were overtraining. Make notes and retain for learning aim C.	
27–29	**A6** Biomechanics in personal training	GW / IS	• **Practical activity 1:** learners taken through a bicep curl, triceps extension and calf raise. The varieties of these three exercises can be shared and demonstrated. This introduces the three class of lever systems, which will be accompanied by the 1,2,3 = F,L,E rhyme. • **Practical activity 2:** learners taken through a deadlift or kettlebell swing; either as a tutor demonstration or video guidance. • **Individual activity:** learners use both practical activities to make notes on lever systems and the concept of gravity, centre of gravity, momentum, force and the kinetic chain. • **Plenary:** learners to research common spinal disorders and be ready to feed back in the next session.	Free weights – barbells, dumbbells FLE cards Device for videoing Slow motion analysis app
30	**A6** Biomechanics in personal training	GS or V	• **Practical activity:** attend a Pilates or yoga class or invite an instructor of those two disciplines to speak with learners. • **Individual activity:** learners use the experience to report on the effects of exercise and core stability on posture. • **Whole-class discussion:** learner feed back on common spinal disorders.	Access to Pilates/yoga class/instructor Mats
31–36	Assessment of learning aim A	AW	• **Individual activity:** assignment 1 for learning aim A covering all body systems studied.	Assignment brief



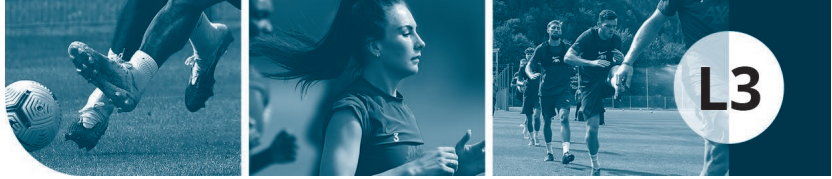
Lesson	Topic	Lesson type	Suggested activities	Resources
Learning aim B: Explore client health and wellbeing to plan personal training programmes				
37–40	**B1** Factors that affect client health and wellbeing	GW / IS	• **Whole class discussion:** tutor takes learners back to their observation/meeting of a personal trainer and their discussions of the nature of clients they train. Discuss the different needs of the clients, which will support further discussions and learning in **C6.** - Facilitate and collate a discussion on the lifestyle factors learners think with affect client health and wellbeing. - A learner is allocated a factor from the unit content. • **Individual activity:** learners plan a presentation of their choice on the allocated factor. The presentation should include: - key indicators of health and wellbeing - how the factor can affect health and wellbeing - the benefits of regular exercise for that factor. • **Presentation:** learners deliver their presentation as an opportunity to develop communication skills required as a personal trainer. Materials are copied and shared amongst learners. • **Plenary:** research examples of PAR-Q and complete, acting as a client.	Access to computers and the internet
41–44	**B2** Health conditions and client screening methods - Physical and mental health conditions	GW / IS	• **Whole-class discussion:** a similar format whereby tutor captures the physical and mental health conditions learners are aware of. Revisit learning from Unit 2. • **Individual activity:** learners follow their presentation template about factors and complete this for an allocated health condition from the unit content: - signs and symptoms of the health condition - the benefits of exercise in preventing or supporting management of this condition.	Access to computers and the internet



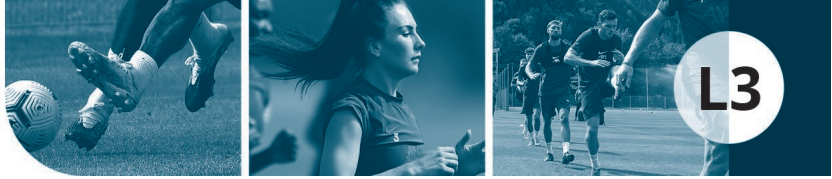
Lesson	Topic	Lesson type	Suggested activities	Resources
			• **Presentation:** learners deliver their presentation as an opportunity to develop client feedback skills required as a personal trainer. Materials are copied and shared amongst the learners. • **Plenary:** research examples of informed consent forms and complete, acting as a client.	
45–49	**B2** Health conditions and client screening methods - Client screening assessments	IS / GW / V	• **Tutor presentation:** learners introduced to: - reasons why screening is used to determine readiness to participate in personal training - the importance of protocol and client confidentiality - video examples and/or a visit to a local facility to observe fitness screening assessments to exemplify professionalism of a personal trainer. • **Independent study:** research and produce information leaflets on the requirements and protocols for the health and fitness assessments listed in the unit content. Design a format of recording data from the assessments. Complete a five-minute explanation of the protocol. • **Paired activity:** practise performing some of the assessments on a partner. Use these practicalities to identify and note down any limitations to testing and contraindications. Learner-led warm-ups completed where necessary • **Tutor presentation:** conclude the learning of fitness assessments by discussing the strengths and weaknesses of the fitness assessments for different types of client, and what methods should be used to improve validity and reliability.	Screening documentation Access to a computer and the internet Associated equipment linked to the fitness assessments: - Heart rate monitor - Blood pressure monitor (manual and digital) - Weighing scales - Measuring device - Mat - Dynamometer - Skinfold callipers - Sit and reach equipment - Stationary bike (if available)



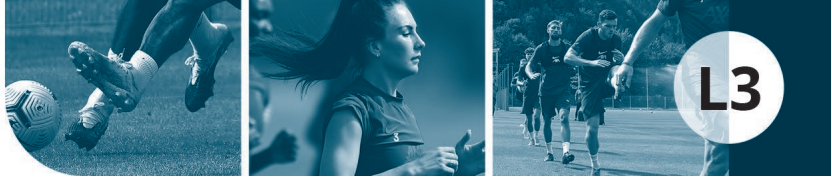
Lesson	Topic	Lesson type	Suggested activities	Resources
50–51	**B2** Health conditions and client screening methods - Referrals	GW	• **Paired activity:** use case studies to interpret the fitness assessment data. Use role play to set goals for the client whilst practising empathy with their current state of readiness. • **Paired activity:** research the type of specialist that may be used as part of a referral process from these case studies. Set up a 'stall' to demonstrate the key role this specialist plays in medical support and lifestyle management. • **Marketplace learning:** visit the stalls in a careers fair format, completing key notes on each specialist role.	Case studies
52–53	**B3** Strategies to encourage long-term positive lifestyle practice	GW	• **Tutor presentation:** psychology on behaviour changes and the motivational theories that affect adherence to exercise. • **Tutor presentation:** the interventions available to support clients with behaviour change. • **Group activities:** create online quizzes about the key terms linked with the psychological theories and interventions. • **Plenary:** leaners complete quizzes to secure understanding.	Textbooks and access to visual images of theories Access to online quiz creation platform
Learning aim C: Explore personal training methods and programming				
54–55	**C6** Designing personal exercise and training programmes	IS	• **Tutor presentation:** show a video montage of different forms of exercise. Learners identify specific components of fitness used. • **Individual activity:** formative assessment on previous learning on principles of training and FITT. • **Tutor presentation:** revisit the rowing experiment data in **A2** and use to show how intensity of training is calculated. • **Whole group discussion.** use scenarios of different clients to discuss the options of adapting FITT. • **Plenary:** research the protocol for 1RM and 10RM assessment.	Video montage Online quiz Case studies



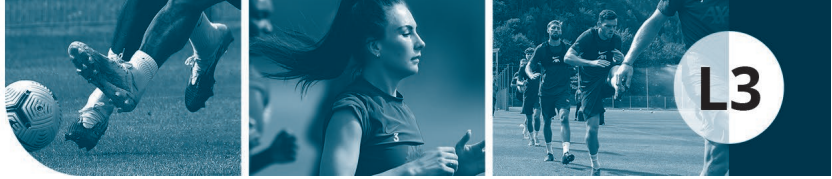
Lesson	Topic	Lesson type	Suggested activities	Resources
56–57	**C1** Personal training methods for cardiovascular endurance	V / GW / IS	• **Practical activity 1:** visit to a gym facility to use cardiovascular machines and be shown types of cardiovascular training methods and how to accurately apply training thresholds. • **Paired activity:** instruct a peer on an allocated method. • **Practical activity 2:** visit a different location, e.g. a park, and participate in the training methods in this location. • **Individual activity:** write up notes and consolidate learning. Complete session plans on cardiovascular training methods using the suggested headings in the delivery guide.	Six-week access to a gym-based facility Access to cardiovascular machines Outdoor park/fitness trail Session plan templates
58–59	**C2** Personal training methods for muscular strength	V / GW / IS	• **Practical activity 1:** visit to a gym facility to use the free weight training area. Following a warm-up, complete the 1RM fitness assessment. Participate in a variety of training methods to develop muscular strength using calculation of a percentage of 1RM. • **Paired activity:** instruct a peer on an allocated exercise and method. • **Practical activity 2:** visit a different location, i.e. a park, and participate in strength training in this location. • **Individual activity:** write up notes and consolidate learning. Complete session plans on muscular strength training methods using the suggested headings in the delivery guide.	Six-week access to a gym-based facility Access to free weights Outdoor park with strength training equipment Session plan templates
60–61	**C3** Personal training methods for muscular endurance	V / GW / IS	• **Practical activity 1:** visit to a gym facility. Following a warm-up, complete the 10RM fitness assessment. Participate in a variety of training methods on fixed resistance machines to develop muscular endurance using calculation of a % of 10RM. • **Paired activity:** instruct a peer on an allocated exercise and	Six-week access to a gym-based facility Access to free weights, fixed resistance machines, resistance bands



Lesson	Topic	Lesson type	Suggested activities	Resources
			method. • **Practical activity 2:** participate in a circuit training class. • **Individual activity:** write up notes and consolidate learning. Complete session plans on muscular endurance training methods using the suggested headings in the delivery guide.	Access to a circuit training class (indoor or outdoor) Session plan templates
62	**C4** Personal training methods for flexibility	GW / IS	• **Practical activity 1:** using and indoor or outdoor area, participate in a variety of flexibility training. • **Paired activity:** instruct a peer or small group on an allocated stretching type. • **Individual activity:** write up notes and consolidate learning. Complete session plans on flexibility training methods using the suggested headings in the delivery guide.	Towel Mat Belt Mat Session plan templates
63	**C5** Personal training methods for functional exercise	GW / IS	• **Practical activity 1:** using and indoor or outdoor area, participate in a variety of core stability, balance and coordination exercises. • **Paired activity:** instruct a peer or small group on an allocated exercise. **Individual activity:** write up notes and consolidate learning. Complete session plans on functional exercise methods using the suggested headings in the delivery guide.	Towel Mat Resistance bands Balance/stability ball Wobble board
64–68	Assessment of learning aims B and C	AW	• **Individual activity:** assignment 2 for learning aims B and C, covering all client screening, practical application of training methods and written reports.	Assignment brief
Learning aim D: Plan, deliver and review personal training sessions for a client				
69–70	**D1** Planning a personal	IS / RS	• **Tutor presentation:** reinforce the need for a robust planning process and its importance in ensuring the sessions are successful.	Session plan templates



Lesson	Topic	Lesson type	Suggested activities	Resources
	training session		Ensure SMART targets are fully understood. • **Individual study:** - Use previous session plan template and populate with a session for an individual or small group using a choice of methods and equipment previously studied in learning aim C. - Complete a risk assessment for the area(s) being used. - Ensure SMART targets are included and have been discussed with the client. - Prepare cue cards or revision notes on the expectations for preparing the clients. Practise the welcome part of the session. - Prepare cue cards or revision notes on how to conclude the session effectively. • **Revision:** Practise terminology as appropriate.	Risk assessment template Cue cards Assignment brief
71–74	**D2** Instructing personal training session	IS / GW	• **Tutor presentation:** reinforce the expectations for their instruction and delivery of a training session as per the delivery guide. • **Small-group activities:** peer-reviewed delivery of a personal training session. Groups split with learners having the opportunity to lead the rest of the group in their planned session. The group being led will be asked to provide peer review about the session and its delivery to inform planning and any changes for the assessed session. Video can also be used as part of this review.	Access to gym facility Session plans Peer review documentation Device for videoing
75–79	**D2** Instructing personal training session	GW	• **Paired activity:** complete a personal training session and deliver a planned session to a peer. Video for evidence and feedback.	Access to gym facility Completed session plan Device for videoing
80–82	**D3** Reviewing own performance in providing	GW	• **Tutor presentation:** tutor to present the process of reflection and review and its importance when evaluating a session.	Feedback methods – online and paper



Lesson	Topic	Lesson type	Suggested activities	Resources
	personal training		- Discuss and share a variety of client feedback methods. - The key aspect is to review the training against the needs of the client – are the clients getting what they need from the session? • **Paired activity:** ask learners to design a personal action plan for development and some relevant feedback for their client/individual. • **Independent study:** use the feedback to add notes ready for the action plan in order to review own performance in the session and the adaptations that would be actioned for the next session. • **Plenary:** revisit the client's fitness assessments and goals.	based Action plan templates
83	**D4** Reviewing client's performance, fitness levels and goals	IS	• **Independent study:** review client's SMART targets and fitness levels and make recommendations and modifications for future sessions.	Session plans
84–89	Assessment of learning aim D.	AW	• **Individual activity:** leaners complete assignment 3, covering learning aim D.	Assignment brief
90	Unit review	GW / IS	• **Independent study/group activity:** learners review the list of qualities of a personal trainer in the initial lesson of the unit. Through discussion they add or amend this list to reflect on the expectations and practicalities of the career of personal training.	

Pearson is not responsible for the content of any external internet sites. It is essential for tutors to preview each website before using it in class so as to ensure that the URL is still accurate, relevant and appropriate. We suggest that tutors bookmark useful websites and consider enabling learners to access them through the school/college intranet.