

Next Generation Higher National Unit Specification

Strength and Conditioning Trainer (SCQF level 8)

Unit code: J7CN 48

SCQF level: 8 (16 SCQF credit points)

Valid from: session 2024–25

Prototype unit specification for use in pilot delivery only (version 3.0) August 2024

This unit specification provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This unit specification is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

The information in this unit specification may be reproduced in support of SQA qualifications only on a non-commercial basis. If it is reproduced, SQA must be clearly acknowledged as the source. If it is to be reproduced for any other purpose, written permission must be obtained from permissions@sqa.org.uk.

This edition: August 2024 (version 3.0)

© Scottish Qualifications Authority 2023, 2024

Unit purpose

In this unit, learners develop knowledge and skills to become a strength and conditioning trainer. A strength and conditioning trainer plans, delivers and reviews participants' physical and physiological preparation and aligns training to specific performance outcomes. Strength and conditioning trainers understand physical characteristics and what it takes to be resilient to the demands of the intensity and volume of a training programme. They combine theory and application of training throughout their client's journey to improve their performance.

Entry requirements and progression routes

Learners must have completed one of the following qualifications before undertaking the Professional Development Award (PDA) in Strength and Conditioning Trainer:

- ♦ Higher National Certificate (HNC) Physical Activity and Health
- ♦ HNC Fitness, Health and Exercise
- an industry-recognised Gym Instructor qualification

Centres must ensure learners undertaking the qualification are at least 16 years old prior to the course start date due to Student Public Liability Insurance requirements.

We recommend that learners have some experience and/or participation of working with sporting and/or athletic teams and/or individuals within a sport and/or physical activity environment. We recommend that learners carrying out the unit have communication skills to a level equivalent to at least SCQF level 6.

The unit is an optional unit in the Next Generation: Higher National Diploma (HND) in Physical Activity and Health (SCQF level 8) or can be delivered as a stand-alone unit. Learners must complete this unit and the Strength and Conditioning 1 unit to achieve the PDA in Strength and Conditioning Trainer.

Unit outcomes

Learners who complete this unit can:

- 1 conduct a consultation, needs analysis and physical assessment for a client
- 2 design an individualised strength and conditioning training programme
- 3 critically examine an individualised strength and conditioning training programme
- 4 deliver and evaluate an individualised strength and conditioning training programme
- 5 examine the scope of practice and importance of self-reflection as a strength and conditioning trainer

Evidence requirements

Learners can generate evidence in the form of open-book stand-alone assignments or portfolio work.

Conduct a consultation, needs analysis and physical assessment for a client (outcome 1)

Consultation

Learners must conduct:

- an initial consultation with the client (for a minimum of 30 minutes)
- a participant and sport and/or activity needs analysis
- a series of physical screens and/or tests

Learners must do this in a real physical training environment. They must agree on specific, measurable, attainable, realistic and timely (SMART) goals with the client.

During the consultation, learners must:

- identify short and long-term goals by ascertaining what the client wishes to gain from a training programme, and the rationale for this
- identify lifestyle factors including sleep, nutrition and commitments: personal, school and work
- identify training history and current training and/or physical activity levels. Learners must consider what has and hasn't worked well for the client in the past, and explore any training preferences that may influence the exercise selection
- identify injury history: existing and previous injuries
- identify any performance-specific needs to determine whether the client's training goals should be sport- or activity-specific, and the level of their involvement in the sport or activity
- collect data on the client's physical status, such as resting heart rate, height, weight

Needs analysis

Learners must determine the client's training needs for their sport or activity through analysis of the metabolic and movement demands of the sport or activity, together with its common injury profile. Learners must design a battery of physical screens and/or tests that are relevant to the client's sport or activity needs and their personal goals.

The needs analysis must be valid, relevant and sufficiently detailed to enable learners to design screens and/or a battery of tests, and to establish relevant goals.

Physical assessment

Learners must:

- specify the physical qualities and capacities needed to benchmark data, through an appropriately designed testing and screening battery that includes:
 - risk stratification
 - anthropometric measurements
 - physical capacity testing
 - movement screening
- compare the results gained from these tests to benchmark data

SMART goal-setting

The learner and the client agree on training goals. The goals must include:

- outcome goals
- performance goals
- process goals

Design an individualised strength and conditioning training programme (outcome 2)

Learners must consider all the data collected (in outcome 3) to design a 12-week strength and conditioning programme. They must:

- establish the training context
- establish the programme overview to include all key events, holidays, competitions, and fixtures
- establish mesocycles (phases of training) in the programme overview that complement the schedule of events
- set review dates to evaluate the effectiveness of the programme
- establish the aims of the sessions, and set training factors
- include a warm-up in each session
- embed any technical development exercises
- base exercise and equipment selection on the participant's needs
- consider including supervised and non-supervised sessions

Learners must also produce a macrocycle and mesocycle timeline.

Critically examine an individualised strength and conditioning training programme (outcome 3)

Learners must:

- explain how they have assessed their client's readiness to exercise, considering their health, goals, lifestyle, and activity levels
- explain the factors considered in planning an appropriate physical assessment for their client, and summarise the delivery and outcomes of the screens and tests
- show videos or photographs of the key physical screens and tests to provide the 'before' evidence
- justify the goals they have developed for their client in relation to the needs analysis and the physical assessment
- evaluate the effectiveness of the consultation, needs analysis, physical assessment and goal-setting activities
- explain how they have determined their client's psychological readiness and justify the motivational techniques embedded in the programme
- justify the design of their 12-week programme and session plans with respect to the participant's lifestyle and goals, the exercise selection, and application of the training principles

Learners accurately identify their strengths and areas for development in the each of the following:

- ♦ consultation
- needs analysis
- physical assessment
- programme design

They justify their decisions in relation to their client's psychological, physiological and technical development needs. Learners provide evidence for their decisions through consultation, needs analysis, physical assessment and agreed goals.

Learners must demonstrate their knowledge of and ability to apply the training principles to the 12-week programme. This can be completed as an open-book assessment.

Deliver and evaluate an individualised strength and conditioning training programme (outcome 4)

Learners must deliver a minimum of 8 weeks from the 12-week programme. Learners deliver the planned session, comprising an introduction and warm-up, main component, and debrief to an individual.

In delivering the session, learners must:

• prepare a safe environment, considering clothing, space, flooring, and equipment

- conduct a verbal screening with reference to the participant's physical activity readiness questionnaire (PAR-Q), and summarise the session and exercises
- deliver a warm-up specific to the session and appropriate to the facility, and use this to screen the client to inform their coaching activities
- introduce exercises and equipment, according to the technical models, through effective demonstration and instruction
- provide a progressive challenge to the client by improving technique or providing appropriate load
- observe the client effectively through correct positioning to provide feedback on correct technique, regress or progress the exercise if appropriate, and motivate the client
- give clear instructions regarding set and reps and monitor recovery times
- provide an accurate session de-brief to the client, and provide two to three movements for development

Assessors must use an assessor checklist to assess learners. Learners must deliver a minimum of 8 weeks of the programme to the individual in a real physical training environment. Learners must make adaptations to facilitate the client's psychological motivation and physiological and technical development.

Evaluation

Learners must evaluate a minimum of 8 weeks from the 12-week programme (minimum of one session per week).

Their evaluation must cover:

- how to monitor and review safe and effective strength and conditioning programmes
- reasons for temporary deferral of exercise
- the benefits and limitations of different methods of monitoring
- methods of evaluating how well strength and conditioning programmes are meeting the client's needs

Examine the scope of practice and importance of self-reflection as a strength and conditioning trainer (outcome 5)

Learners must examine the scope of practice of a strength and conditioning trainer, including:

- the roles of UK and international professional bodies in strength and conditioning and UK sport national governing bodies (NGBs)
- the environments in which a strength and conditioning trainer can work
- the principles, values and ethical codes of practice laid out by professional bodies and/or governing bodies
- credible information sources and research methods and the importance of evidence-based practice
- how to adapt practice for a range of age groups
- how to adapt practice for different genders

When they reflect on the sessions, learners must:

- record and reflect changes made to the client's programme to meet their goals
- record and reflect changes made to the client's programme to help them to progress and develop
- adapt the programme to meets their client's psychological, physiological and technical development needs
- record and reflect on their coaching practice
- record client's attendance and adherence across the delivered sessions
- evaluate the impact and action planning of the programme
- consider next steps for the individual at the end of the programme

Learners must complete their reflections as an open-book assessment. Their reflections must be accurately aligned to the evidence provided in the programme changes, and learners must ensure full coverage of the knowledge-based assessment criteria within the outcomes. They must refer to actual events and actions that have taken place.

Knowledge and skills

The following table shows the knowledge and skills covered by the unit outcomes:

Knowledge	Skills		
Outcome 1	Outcome 1		
Learners should understand:	Learners can:		
 ◆ the consultation process specific to a strength and conditioning programme, planning, and their own professional role boundaries, including the: significance of the consultation as part of the client experience and client journey importance of educating clients about their own role, responsibilities and limitations in providing assistance (scope of practice) importance of communicating with other professionals and the wider support team, for example strength and conditioning coach, sports coach, parent or guardian full range of activities and/or services and/or classes available to clients, and how to provide further information about them different demographics, fitness levels and goals of clients, and how best to cater for their differing needs relevance of data protection and client confidentiality an organisation's participant charter or service promise, and the importance of striving to exceed it related products, systems and technology that help to enhance the participant experience, for example class booking apps evidence-based pre-exercise health screening methods, such as: PAR-Q, PAR-Q+, organisation- or employer-devised methods or a health commitment statement informed consent 	 assess a client's readiness to exercise and the need for signposting or referral to other relevant professionals conduct safe and effective consultations, health assessments, training environment inductions and reviews with clients adapt inductions for individuals and small groups (maximum of five) to maintain effectiveness provide a 'client experience' during consultations, health assessments and inductions, including: engaging and building rapport with clients with varying needs showing empathy giving positive, motivating, timely and relevant feedback to clients being accountable and taking responsibility for clients using effective communication methods to ascertain a client's needs and enhancing the client experience signposting clients to other areas of the facility if they show an interest in other activities or services provided by the organisation set SMART goals linked to a participant's individual needs, wants and motivators 		

Knowledge	Skills
Outcome 1 (continued)	
Learners should understand:	
 physical assessments, including exercises to assess movement skill, strength-based ability and cardiovascular fitness 	
youth maturation monitoring	
 risk stratification models, and when to signpost or refer a client to other specialist exercise professionals and/or medical professionals, including: 	
 how to risk-stratify participants 	
 having a clear understanding of the absolute contraindications to exercise and factors that indicate that a client is at low, medium or high risk of an adverse event occurring during exercise, or the propensity for risk 	
 knowledge of the recognised tools, for example, the Irwin and Morgan traffic light system, other national and/or international evidence-based tools, and national and locally agreed protocols, referral and care pathways 	
relevant health history and current health status, particularly in relation to risk factors for heart disease	
the identification of past and present injuries, disabilities and medical conditions that would necessitate medical clearance or referral to an appropriate medical professional or other clinician or medically supervised exercise programme	
 when to refer, signpost or take action, and what action to take in each circumstance: for example, low, medium or high risk 	
 conduct a range of health and fitness assessments relevant to the training environment and participant, including: 	
checking blood pressure	

Knowledge	Skills	
Outcome 1 (continued)		
Learners should understand:		
 checking maximal and sub-maximal cardio-respiratory fitness checking muscular strength and endurance youth maturation stage body mass index (BMI) measuring waist circumference 		
 taking progress photographs (if desired) 		
understanding contraindications and limitations for testing		
 checking resting heart rate using lifestyle questionnaires to gather relevant information, for example the client's previous and current levels of activity and their exercise likes and dislikes selecting assessments appropriate 		
to the client, and assessment conditions and/or expectations of the organisation		
 monitoring and reviewing participant progress, including: 		
 the importance of building in re-assessments and reviews to support participant progress, motivation and adherence 		
 reviewing a strength and conditioning programme in consultation with the participant 		
Outcome 2	Outcome 2	
Learners should understand:	Learners can:	
 participant expectations and aspirations within the training environment how to build social support and inclusion within the training environment 	 interpret client data in order to understand the different types of clients and their needs demonstrate client engagement: for 	
how to obtain feedback to support exercise adherence	example, deliver an informative tour, deal with client enquiries and offer an end-to-end service	

Knowledge	Skills		
Outcome 2 (continued)	Outcome 2 (continued)		
Learners should understand:	Learners can:		
 a typical client journey in a training environment how to present themselves in a professional and approachable manner, in line with organisational standards the importance of client retention and how to influence this different methods to build rapport to maximise the client experience how to support safe and enjoyable use of the training environment the importance of being accessible and approachable to clients different communication techniques and how to use them, including: observation, non-verbal techniques, body language, open and closed questioning and active listening how to adapt communication methods to meet the needs of clients from differing backgrounds, cultures and experience etc 	 demonstrate exemplary client service to include: problem solving, discretion, influencing, teamwork, suitable language use develop rapport with clients in a friendly and approachable manner while respecting equality and diversity demonstrate a professional demeanour: for example, uniform and personal attributes and positive first impressions demonstrate communication methods appropriate to the participant create a positive and motivating environment that encourages the client to fully engage and adhere to the training programme support the client to recognise and develop their intrinsic and extrinsic motivation to exercise monitor targets, review and evaluate progress and adapt accordingly 		
Outcome 3			
Learners should understand:			
 how they have assessed their client's readiness to exercise, considering their client's health, goals, lifestyle and activity levels the factors in planning an appropriate physical assessment for their client, and summarise the delivery and outcomes of the screens and tests the effectiveness of using videos or photographs to demonstrate the key physical screens and tests to provide the 'before' evidence 			

Knowledge		Skills
Outcome 3 (continued)		
Learners should understand:		
•	the goals they have developed for their client in relation to their needs analysis and physical assessment	
•	the effectiveness of the consultation, needs analysis, physical assessment and goal-setting activities	
•	how to determine their client's psychological readiness and justify the motivational techniques embedded in the programme	
•	the design of a strength and conditioning training programme, and how to respect the client's:	
	 lifestyle and goals 	
	exercise selection	
	 application of the training principles 	
•	how to accurately identify the strengths and areas for development of a strength and conditioning trainer for each of the following:	
	consultation	
	needs analysis	
	physical assessment	
	programme design	
•	how to make decisions to improve their client's psychological, physiological and technical development needs	
•	the impact of the client consultation, needs analysis, physical assessment and agreed goals and how this provides evidence to justify decisions	
•	how to apply the training principles to a strength and conditioning training programme	

Knowledge	Skills	
Outcome 4	Outcome 4	
Learners should understand:	Learners can:	
 different methods to obtain participant feedback and channels of recording and reporting, in line with organisational procedures the feedback cycle and the impact of their role on the client experience how to monitor and review safe and effective strength and conditioning programmes, including: reasons for temporary deferral of exercise the importance of verbal screening and how to conduct it the benefits and limitations of different methods of monitoring methods of evaluating how well strength and conditioning programmes are meeting client needs when to proactively engage with clients and when not to a range of strength and conditioning training methods, including: effective raise, activate, mobilise, potentiate (RAMP) warm-up protocol foundation movements to promote mobility, stability, postural integrity and coordination strength-based training and explosive activities energy system training protocols high intensity running-based high intensity running-based 	 monitor and review the effectiveness of their strength and conditioning programme carry out regular programme review meetings with clients to: ascertain how well the exercise programme is meeting client needs and progression towards goals, and any improvements that can be made to the programme plan evaluate and reflect on planned programmes to ensure the client's physical and psychological needs are being met manage the training environment, demonstrating the ability to effectively interact and support different participants: for example, using effective communication skills rapport-building, technique advice and correction appraise own performance in relation to the session appraise participants' performance in relation to the session assess the appropriateness of the session content in relation to the user group and environment propose changes and adaptations to the session based on the appraisal of own performance, client performance, and appropriateness of session content 	
 activities how to deliver an effective warm-up that contributes to enhancing the specific training session objectives 	observe, monitor and engage with clients to ensure safety and effectiveness by:	
 safe and effective technique for a range of exercises, to cover: 	utilising explanations and demonstrations that are technically correct, safe and appropriate to the individual client.	

bodyweight exercise, including

suspension training

individual client

Knowledge Skills **Outcome 4 (continued)** Outcome 4 (continued) Learners should understand: Learners can engage with clients by: medicine balls observing clients' movements, correcting exercise technique to barbells: lifting and spotting ensure safe and effective alignment, technique execution and use of equipment dumbbells: lifting and spotting providing participant-specific technique coaching cues, feedback, other resistance training equipment, encouragement and reinforcement in such as kettlebells and sandbags a friendly, professional manner supplementary equipment, for observe, monitor and engage with example using mats for trunk clients to ensure safety and strength exercises effectiveness by: • safe and effective technique for a range offering adaptations and alternatives of exercises to address individual that meet a participant's individual participant's needs in an individual or needs while improving performance: group setting, to cover: for example, progression, sub-maximal and maximal regression, corrective strategies and running-based assessment alternative exercises, as required protocols, to include appropriate adopting appropriate positions to indoor options observe participants and respond to sub-maximal and maximal their needs equipment-based assessment monitoring the safety and intensity of protocols exercise sub-maximal and maximal manipulating FITT principles to running-based training sessions, to ensure progression according to include appropriate indoor options individual needs sub-maximal and maximal demonstrating effective coaching equipment-based training sessions methods to cater for different safe and effective technique for a range learning styles, tailoring coaching of exercises, to cover: styles and communication methods - acceleration to individual's needs deceleration ensuring participants understand how to continue their programme of change of direction exercise without direct supervision ♦ how to observe, monitor, and correct demonstrate safe and effective participants to maintain safety and effectiveness of exercise at all times, technique to cover all selected exercise, including: covering: RAMP warm-up how to deliver an effective warm-up for a range of activities foundation movements how to approach participants in a strength-based training and friendly, non-threatening manner explosive activities

energy system protocols

Knowledge	Skills	
Outcome 4 (continued)	Outcome 4 (continued)	
Learners should understand:	Learners can cover:	
, , ,	,	
 referral to manufacturer guidelines and/or other instructions if unfamiliar with the normal use, maintenance, and servicing of equipment consideration of individual participant abilities in equipment selection and set up how wearable technology can be used to support safe and effective strength and conditioning exercises and training sessions 		

Knowledge	Skills
Outcome 5	
Learners should understand:	
 the roles of UK and international professional bodies in strength and conditioning and UK sport national governing bodies (NGBs) 	
 the environments in which a strength and conditioning trainer can work 	
 national recommended guidelines for physical activity and health for different ages, for example guidelines from the UK chief medical officer (CMO) 	
 guidelines and 'position statements' from relevant governing and/or professional bodies 	
 principles, values and ethical codes of practice laid out by professional bodies and/or governing bodies 	
 credible information sources and research methods and the importance of evidence-based practice 	
 current best practice in training clients, both male and female, and from a range of age groups, with a focus on youth sport and older clients 	
 roles and responsibilities of self and others involved in the programme, including the participant and other staff and/or professionals 	
 relevant industry codes of professional conduct and/or ethics related to own role, including safeguarding of young and vulnerable adults, anti-doping, and boundaries of professional relationships 	

Meta-skills

Throughout the unit, learners develop meta-skills to enhance their employability in the sport and physical activity sector.

Self-management

This meta-skill includes:

- focusing: collating and organising information gained from the client consultation process and through the physical assessments and needs analysis; development of client and/or sports participant's training programme; observing and correcting clients' technique during sessions; adapting sessions and/or exercises based on reflection and feedback in outcomes 1, 2, 3, 4 and 5
- ♦ integrity: understanding ethics; being aware of acting on values and principles; work ethic; timekeeping; reliability; discipline; trustworthiness when working with clients during consultation, physical assessment and the training programme delivery process in outcomes 1, 2, 3, 4 and 5
- ♦ adapting: adapting teaching styles; decision-making; being responsible; responding to changes when working with clients during consultation, physical assessment and the training programme delivery process; reviewing sessions based on self-reflection and client feedback in outcomes 1, 2, 3, 4 and 5
- ♦ initiative: independent thinking; motivation; self-belief; responsibility in preparation for working with a client and, more specifically, during the consultation, physical assessment and training programme delivery process; evaluating sessions and gaining feedback from clients and peers in outcomes 1, 2, 3, 4 and 5

Social intelligence

This meta-skill includes:

- ◆ communicating: receiving information; giving information; listening to others when working with clients, either on a one-to-one basis or in groups — in outcomes 1, 2, 3, 4 and 5
- feeling: sense of responsibility; empathy; understanding how others feel when working with clients; developing an understanding of when to show empathy; developing the ability to build relationships; working with clients and planning around their needs; accepting the perspectives of others to understand their feelings and motivations in outcomes 1, 2, 3, 4 and 5
- collaborating: operating in different settings; building relationships with clients; working towards shared goals and team working with other professionals — in outcomes 1, 2, 3, 4 and 5
- ♦ leading: inspiring and motivating others; influencing others and being a role model; developing others when working with clients — in outcomes 1, 2, 3, 4 and 5

Innovation

This meta-skill includes:

- curiosity: noticing significant information; asking questions; information sourcing; problem recognition; evaluating sessions and assessing own development — in outcomes 1, 2, 3, 4 and 5
- creativity: creating training programmes and sessions for clients and/or sports participants; responding to different situations and adapting; coming up with solutions to problems when working with clients and groups in outcomes 1, 2, 3, 4 and 5
- sense-making: analysing client information gained from the consultation and physical assessment process; analysing client programme data and making sense of constant changes and/or adaptations when working with clients and/or sports participants in outcomes 1, 2, 3, 4 and 5
- ◆ critical thinking: analysing client information gained from the consultation and physical assessment process; analysing client programme data and making sense of changes when working with clients; reflecting on decisions implemented — in outcomes 1, 2, 3, 4 and 5

Delivery of unit

We recommend that all outcomes are delivered in a consecutive manner, although the assessments may be distributed at your centre's discretion.

The unit provides 2 Higher National (HN) credits, and 16 Scottish Credit and Qualifications Framework (SCQF) credit points at level 8.

To complete the unit, we recommend 80 hours contact time and 80 hours self-directed study.

Professional recognition

Learners can gain a Professional Development Award (PDA) in Strength and Conditioning as a stand-alone qualification or as part of the HNC and HND in Physical Activity and Health if they complete this unit in conjunction with Strength and Conditioning 1 at SCQF level 7. Both these units have been endorsed against the Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) Strength and Conditioning Trainer Professional Standard, but currently, learners cannot register with CIMSPA as a Strength and Conditioning Trainer. This is under review and learners will be notified once this has been updated.

For learners to be accredited the full Level 3 Diploma for Strength and Conditioning Trainer award from the UK Strength and Conditioning Association (UKSCA), centres must adhere to the evidence requirements, registration costs and assessor criteria. Learner costs and assessor criteria are outlined below:

- assessor fees (formative assessment and support built in)
- registration and certification fees
- UKSCA membership for 1 year and associated benefits
- student learning manual
- access to the e-learning resources

If your centre does not want to accredit learners with the full Level 3 Diploma, you must follow all outcomes as stated, but you do not need to adhere to the UKSCA registration or assessor criteria. Please refer to the UKSCA Assessment Summary Table for additional guidance.

Additional guidance

The guidance in this section is not mandatory.

This unit provides learners with the opportunity to develop the knowledge and skills required to become a strength and conditioning trainer. Learners plan, deliver, and review the physical and physiological preparation of participants and align these to specific performance outcomes. Learners understand physical characteristics and what it takes to be resilient to the demands of the intensity and volume of a training environment. Strength and conditioning trainers bridge the gap between the theory and application of training through a participant's journey to improved performance.

Approaches to delivery

Conduct a consultation, needs analysis and physical assessment for a client (outcome 1)

We recommend that learners develop a consultation document that allows them to collect all the essential personal and medical information as stated within the 'Knowledge and skills' section. We also recommend that learners select appropriate health and performance-based fitness tests that are appropriate to the clients' capabilities and link to the clients' goals and areas they wish to develop through training.

The risk stratification must apply risk analysis tools (ACSM or Irwin and Morgan) in conjunction with the PAR-Q, to evaluate the client's readiness to engage with an ongoing programme of exercise.

Learners must conduct a 'needs analysis' that determines the client's training needs for their sport or activity through analysis of the metabolic and movement demands of the sport or activity, together with its common injury profile. Learners then must design a battery of physical screens and/or tests that are relevant to the client's sport or activity needs and their personal goals.

The analysis must be valid, relevant and sufficiently detailed to enable the screens and/or tests battery to be designed, and relevant goals to be established.

Learners must conduct a battery of physical screens and/or tests that are based on the needs analysis and the client's desired personal goals. To do this, learners must:

- specify the physical qualities and capacities needed to benchmark through an appropriately designed testing and screening battery, which includes:
 - risk stratification
 - anthropometric measurements
 - physical capacity testing
 - movement screening
- compare the results gained from these tests to benchmark data

Examples of standardised tests for each of the fitness components are:

- power: vertical jump; standing long jump; standing triple jump; force plate data
- flexibility: hamstring extension; modified sit and reach; Thomas Test; use of goniometry in flexibility testing; functional movement screening (FMS) protocols; Y Balance Test
- strength: one to five repetition maximum; isokinetic tests; dynamometer tests
- anaerobic endurance: line drill; jam test; repeated sprint test; phosphate decrement test
- aerobic endurance: multi-stage fitness test; Cooper 12-minute run test; Yo-Yo test; direct VO2 max tests; onset of blood lactate accumulation value (OBLA) or maximal lactate steady state (MLSS) test
- ◆ speed and agility: 5 to 40 metres sprint; T-Test; agility tests; change of direction tests,
 (COD) such as 505 or modified versions
- measuring body composition using callipers, body mass, height, measuring tape, and bioelectrical impedance analysis equipment

This list is not exhaustive.

Learners agree on training goals with their client. The goals should adhere to the SMART principles, and must include:

- outcome goals
- ♦ performance goals
- process goals

Design an individualised strength and conditioning training programme (outcome 2)

Learners demonstrate all the knowledge and skills required through the application of the training principles and training guidelines through the development process, designing an individual's strength and conditioning training programme. Learners must consider all the information collected through the needs analysis, physical assessment and goal-setting process.

Learners should consider periodisation and programming when they design the strength and conditioning training programme. The macrocycle needs to embed training and personal events. Learners should rank the importance of the events to enable effective recovery periods to be defined. The age, stage and level of the client's training or sport experience needs to dictate the phase attributed to each week of the macrocycle.

Learners need to make the mesocycles an appropriate length and combination to meet the client's training and development needs. These should be logically named. The mesocycle objectives need to be in SMART format, and learners should evidence horizontal progression by sequencing the client's objectives in a logical progression from left to right. Learners need to evidence vertical integration needs by the combination of different training types; strength, speed and energy systems training objectives should be compatible. Testing, screening and data-monitoring must be relevant to the overall programme and the objectives set.

Critically examine an individualised strength and conditioning training programme (outcome 3)

Learners evaluate their participation in the design process of a strength and conditioning training programme. Learners should understand why, when and how to evaluate personal performance and be able to justify their chosen methods.

Deliver and evaluate an individualised strength and conditioning training programme (outcome 4)

Learners should deliver the session in accordance with the UKSCA guidelines. You should give learners the opportunity to develop their coaching ability. Learners should aim to develop the following:

- practical competence
- ♦ communication skills (verbal and non-verbal)
- ♦ listening skills

You should give learners the opportunity to evaluate their participation in practical activities and during formative assessment. Learners should understand why, when and how to evaluate personal performance and activities delivered.

Examine the scope of practice and importance of self-reflection as a strength and conditioning trainer (outcome 5)

Learners should gain an understanding of:

- the scope of practice of a strength and conditioning trainer
- ♦ the roles that UK and international professional bodies in strength and conditioning and UK sport national governing bodies (NGBs) play in strength and conditioning

Learners should gain an understanding of:

- the environments in which a strength and conditioning trainer can work
- the principles, values and ethical codes of practice laid out by professional bodies and/or governing bodies
- credible information sources and research methods, and the importance of evidence-based practice
- how to adapt practice for a range of age groups
- how to adapt practice for different genders

Give learners the opportunity to evaluate their performance across all session participation and develop their reflective skills as a strength and conditioning trainer.

Approaches to assessment

We recommend that the outcomes and associated assessments are completed in the order they appear. Learners must successfully achieve each outcome before progressing to the next to ensure they have the competence and ability to lead a safe and effective strength and conditioning programme for an individual.

If your centre wants learners to achieve UKSCA recognition, you must follow the recommended assessment conditions. If your centre does not want learners to achieve UKSCA recognition, you may use an alternative assessment approach.

Conduct a consultation, needs analysis and physical assessment for a client (outcome 1)

Learners must:

- conduct an initial consultation
- conduct a sport and/or activity needs analysis
- ♦ conduct a series of physical screens and/or tests
- agree SMART goals

These are performed with a client in a physical training environment. Learners record all information and submit this as a written report. Assessors can assess the physical testing either face-to-face, or as a digital video submission. Assessors should complete an assessor checklist to assess learner competence.

Learners must conduct the consultation and needs analysis with the client for a minimum of 30 minutes. This can be completed either face-to-face or through a remote video call. The consultation includes informed consent, a positive PAR-Q and an ACSM pre-participation health screen. Learners should record the needs analysis and SMART goals in a written format, as part of their learner portfolio.

Learners then complete a series of physical screens and/or tests in the real physical training environment with the same client. The physical screens and/or tests should be captured in video format and learners record the results in written format, as part of their learner portfolio.

Design an individualised strength and conditioning training programme (outcome 2)

Learners should complete a written 12-week programme and detail their session plans for the first mesocycle. These should be kept in their learner portfolio. They must develop their training context before creating the 12-week strength and conditioning programme. This should be kept in their learner portfolio.

Learners should demonstrate their knowledge of and ability to apply the training principles to the 12-week programme. They need to select exercises in the programme from the UKSCA Technical Models, and in accordance with the client's needs and facility access and limitations.

Critically examine an individualised strength and conditioning training programme (outcome 3)

Learners can create and deliver a presentation, using a suitable software package, that justifies their programme design. Learners should include decisions they made in relation to their client's psychological, physiological and technical development needs. The consultation, needs analysis, physical assessment and agreed goals provide the evidence for the decisions made. Learners should plan that their presentation lasts between 20 to 30 minutes and can be shown face-to-face or through remote or recorded video conferencing. The assessor may wish to ask supplementary questions to clarify points made in the presentation, but also for authentication purposes. Authentication questions focus on validating learners' work and the safety and effectiveness of the programme, in line with the client's needs.

Deliver and evaluate an individualised strength and conditioning training programme (outcome 4)

Learners must deliver a minimum of 8 weeks from the 12-week programme. The time should be sufficient to demonstrate physical adaptations towards the client's goals. The delivery of the programme should facilitate the participant's psychological motivation, and physiological and technical development.

Learners are assessed delivering a minimum of one of their planned sessions using an assessor checklist.

Learners record and reflect on the continuing changes they are making to the programme (and their coaching practice) to continue to meet the client's needs and to progress towards their goals. Learners should record this in a self-reflective evaluation form. These evaluations are then used as part of the presentation in outcome 5.

Examine the scope of practice and importance of self-reflection as a strength and conditioning trainer (outcome 5)

Learners examine the scope of practice of a strength and conditioning coach and may answer a series of open-book restricted-response questions that form part of the learner portfolio. Questions should cover coaching practice, including the delivery of safe and effective sessions, carrying out the roles and responsibilities of the strength and conditioning trainer, and adapting practice for different populations.

Learners can create and deliver a presentation, using a suitable software package (after at least 8 weeks of delivering the programme) that focuses on the impact of the programme, as well as client attendance and adherence. The assessor may ask supplementary questions to authenticate the evidence and to satisfy any knowledge gaps.

All written work should contain a declaration of validity that the content is the learner's own work, unless cited otherwise. Learners should sign and date their submissions. We encourage digital submissions through centres' virtual learning environment (VLE) using anti-plagiarism software.

Information for those learners intending on gaining UKSCA accreditation

The following information summarises the UKSCA assessment tasks, methods and templates that learners must complete if they wish to achieve UKSCA accreditation. We recommend that centres utilise the UKSCA Assessment Templates to generate learner evidence.

Task D: Initial consultation, needs analysis, physical assessment and programme design

D1: Initial consultation

This task can be assessed by a portfolio of evidence (written). You can use the D1-L: SCRIPT — Learner evidence template.

D2: Needs analysis

This task can be assessed by a portfolio of evidence (written). You can use the D2-L: Needs Analysis — Learner evidence template.

D3: Physical assessment

This task can be assessed by a portfolio of evidence (written). You can use the D3-L: Screens and Tests — Learner evidence template.

D4: Goal-setting

This task can be assessed by a portfolio of evidence (written). You can use the D4-L: Goal-Setting — Learner evidence template.

D6: Programming presentation and justifications

This task can be assessed by a portfolio of evidence (written), presentation (and professional discussion). You can use the D6-L: Programming — Learner presentation template, and the D6-A: Programming — Assessor observation template.

Task E: Programme delivery, impact and reflections

E1: Coaching practice and programme changes

This task can be assessed by a portfolio of evidence (written). You can use the E1-L: Programme Changes — Learner evidence template.

E2: Coaching practice and programme reflections

This task can be assessed by a portfolio of evidence (written). You can use the E2-L: Reflections —Learner evidence template, and the E2-A: Reflections — Assessor template.

E3: Application of anatomical, physiological and biomechanical knowledge

This task can be assessed by an online quiz. You can use the E3-A: Application of A&P — Assessor template.

Learners who have successfully completed HNC Physical Activity and Health **do not** need to complete this section, as it has been mapped within the HNC qualification.

E4: Programme impact presentation

This task can be assessed by a portfolio of evidence (written) and professional discussion. You can use the E4-L: Programme Impact — Learner presentation template, and the E4-A: Programme Impact — Assessor observation template.

Equality and inclusion

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the assessment arrangements web page: www.sqa.org.uk/assessmentarrangements.

Information for learners

Strength and Conditioning Trainer (SCQF level 8)

This information explains:

- what the unit is about
- what you should know or be able to do before you start
- what you need to do during the unit
- opportunities for further learning and employment

Unit information

This unit develops the knowledge and skills gained from Strength and Conditioning 1 at SCQF level 7, and allows you to work with clients from either a sports or fitness context to develop their performance and physical fitness.

The unit focuses on working safely in a gym and/or exercise environment to deliver a strength and conditioning session, before moving on to complete a consultation with an individual to collect information that helps you to develop a 12-week strength and conditioning programme. The consultation includes a needs analysis, and you plan a battery of physical tests to establish baseline measurements. The 12-week plan should focus on developing the technical ability of the individual, and you then deliver a minimum of 8 weeks to ensure physiological adaptations are apparent. You can reflect on the success of the programme towards the end of the unit. You also complete a critical evaluation of the programme design, drawing on your own reflective evaluation of the sessions, feedback from your assessor and feedback from your client.

You are expected to develop a portfolio to evidence your performance throughout the unit. You also take part in a range of professional discussions with the assessor and present some of your evidence using PowerPoint or another presentation method.

Before starting the unit, we recommend that you have completed Strength and Conditioning 1 at SCQF level 7, are competent in the foundational movements, and are able to deliver a RAMP warm-up. However, you can take the Higher National Diploma (HND) unit without previously taking the Higher National Certificate (HNC) (SCQF level 7) unit. You should also ensure you have some experience in an exercise environment and have good communication and presentation skills.

When taken together, the Strength and Conditioning 1 unit at SCQF level 7 and this Strength and Conditioning Trainer unit at SCQF Level 8 have been endorsed against the CIMSPA Strength and Conditioning Trainer Professional Standard.

You may wish to become an accredited UK Strength and Conditioning Association (UKSCA) Trainer. This involves additional assessments completed by a UKSCA Accredited Assessor. Your centre can provide support and/or guidance if you wish to carry out this additional accreditation. There are also opportunities for further learning in related vocational training or degree qualifications.

Meta-skills

Meta-skills enhance your employability in the physical activity and health sector. As you progress through the unit, you develop meta-skills in self-management, social intelligence and innovation. You develop these meta-skills naturally in all outcomes as you learn and create assessment responses.

Self-management

This meta-skill includes:

- focusing: collating and organising information gained from your consultation process with your client and by completing physical assessments and a needs analysis; development of client and/or sports participant's training programme; observing and correcting client's technique during sessions; adapting sessions and/or exercises based on reflection and feedback
- integrity: understanding ethics; being aware of acting on values and principles; work ethic; timekeeping; reliability; discipline; trustworthiness when working with your clients during consultation, physical assessment and the training programme delivery process
- adapting: adapting teaching styles; decision-making; being responsible; responding to changes when working with clients during consultation, physical assessment and the training programme delivery process; reviewing sessions based on self-reflection and client feedback
- initiative: independent thinking; motivation; self-belief; responsibility in preparation for working with a client, and more specifically, during the consultation, physical assessment and training programme delivery process; evaluating sessions and gaining feedback from clients and peers

Social intelligence

This meta-skill includes:

- communicating: receiving information; giving information; listening to others when working with clients either on a one-to-one basis or in groups
- feeling: sense of responsibility; empathy; understanding how others feel when working with clients; developing an understanding of when to show empathy; developing the ability to build relationships; working with clients and planning around their needs; accepting the perspectives of others to understand their feelings and motivations
- collaborating: operating in different settings; building relationships with clients; working towards shared goals and team working with other professionals
- ♦ leading: inspiring and motivating others; influencing others and being a role model; developing others when working with clients

Innovation

This meta-skill includes:

- curiosity: noticing significant information; asking questions; information sourcing; problem recognition; evaluating sessions and assessing own development
- creativity: creating training programmes and sessions for clients and/or sports participants; responding to different situations and adapting; coming up with solutions to problems when working with clients and groups
- sense-making: analysing client information gained from the consultation and physical assessment process; analysing client programme data and making sense of constant changes and/or adaptations when working with clients and/or sports participants
- critical thinking: analysing client information gained from the consultation and physical assessment process; analysing client programme data and making sense of changes when working with clients; reflecting on decisions implemented

Administrative information

Published: August 2024 (version 3.0)

Superclass: MD

History of changes

Version	Description of change	Date
2.0	 Updated 'Entry requirements' for learners undertaking the unit as a stand-alone PDA. 	June 2024
	 Amended wording for CIMSPA Professional Standards Recognition. 	
3.0	 Reduction in outcomes from 7 to 5. Outcome 1 and 2 added to J7X0 47 to align with CIMSPA Professional Standards and UKSCA Assessment Instruments. 	August 2024

Note: please check <u>SQA's website</u> to ensure you are using the most up-to-date version of this document.

© Scottish Qualifications Authority 2023, 2024