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# Unit Specification

## USP195 – Planning and instructing strength and conditioning sessions

Unit reference number: Y/618/3399

**Level: 2**

**Guided Learning (GL) hours: 39**

### Overview

This unit provides learners with the knowledge and skills required to plan, instruct and review strength and conditioning sessions. Learners will learn how to design and structure strength and conditioning sessions to train different components of fitness. They will also learn how to collect information and screen clients to identify clients who are ready to participate, or who need to defer or delay exercise, or who need to be signposted to other professionals. They will learn how to prepare the environment and equipment for strength and conditioning sessions.

Learners will develop their knowledge of the importance of reflective practice and will develop skills to reflect on their own practice and identify ways to improve their professional knowledge and skills.

The scope of practice of the strength and conditioning instructor is to work with apparently healthy adults; however, they will need to know how to manage or signpost clients with other specialist needs.

Other populations who may participate in strength and conditioning may include: young people aged 11+.

## **Learning outcomes**

On completion of this unit, learners will:

LO1 Know how to gather and analyse information to plan and prepare for strength and conditioning sessions

LO2 Know how to plan and progress strength and conditioning sessions

LO3 Know how to instruct, supervise and review strength and conditioning sessions

LO4 Be able to gather, analyse and use information to plan and prepare for strength and conditioning sessions

LO5 Be able to plan and progress strength and conditioning sessions

LO6 Be able to instruct, supervise and review strength and conditioning sessions

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# Unit content

## LO1 Know how to gather and analyse information to plan and prepare for strength and conditioning sessions

### Information that must be gathered and analysed when planning a strength and conditioning session

#### Taught content

- Purpose of gathering information
  - To support planning of a safe and effective session
  - To identify clients who need signposting to other professionals
  - To meet insurance requirements – Public liability and Professional indemnity
  - To meet professional ethical and legal requirements:
    - CIMSPA Professional standards
    - REPs code of ethics
    - Health and Safety
    - Risk assessment
    - Safeguarding
    - Data protection
    - Confidentiality
  - To meet organisations' customer service commitment
- Information to gather
  - Environment – location, type of environment, space available, health and safety considerations, etc.
  - Equipment – type of equipment, health and safety considerations, etc.
  - Self-professionalism, how to manage and work with groups, own clothing and footwear, first aid requirements, insurances
  - Clients – health screening and risk stratification, clothing and footwear, number of clients (space), type of client (for example, male, female, age range, ethnicity), specific needs to be accommodated, for example, beginner, mixed ability group, skill and fitness level, etc. (see below)
- Planning considerations
  - Type of session to be delivered
  - Locations
  - Session objectives:
    - Physical fitness
    - Health benefits
    - Sports performance
  - Time of session – morning, afternoon, evening
  - Duration of session – session timings
  - Regular session or cover for another instructor
  - Employed or self-employed contract – completion of time-sheets or maintaining other business records for freelance instructors

## Safe and effective environments for strength and conditioning sessions

### Taught content

- Type of environment
  - S&C studios
  - Gym-based environment
  - Home
  - Outdoors: parks, pitches, athletics environments
  - Community locations e.g. church halls
- Identification of hazards and risks in the environment via formal or informal risk assessment
- Recognition of health and safety issues that will impact on planning
  - Environment needed – type of environment, for example, indoors or outdoors and space required for number of participants, activities happening at the same time
  - Temperature and ventilation and consideration to intensity and duration of each component
  - Space and consideration to number of people attending and available space
- Awareness of standard procedures and arrangements that need to be adhered to
  - Own or organisation procedures
  - Opening and closing procedures at venue
  - Security when entering and leaving premises
  - First aid facilities, for example, location of first aid kit and named duty first aider; accident report book and procedures
  - Emergency contact telephone – emergency services and class member emergency contacts
  - Fire exits and extinguishers and emergency evacuation procedures
  - Availability of showers or refreshments
  - Risk assessment and reporting procedures
  - How to analyse risk – severity and likelihood rating

## Equipment used for strength and conditioning sessions

### Taught content

- Type of equipment that may be used (not exhaustive)
  - Barbells, dumbbells, bands/tubing, ladders, hurdles, medicine balls, steps, stability balls, mats, body bars, kettlebells, suspension training equipment
- Availability of equipment – enough equipment for all clients
- Health and safety
  - Storage and stacking (before, during and after sessions)
  - Hygiene, cleaning and chemicals used to clean equipment
  - Maintenance and reporting of damaged equipment
  - Safe manual handling and lifting and passing (where appropriate)
  - Electricity
  - Manufacturers' guidelines for equipment use
  - Procedures for risk assessment – formal and informal
  - How to analyse risk – severity and likelihood rating

## Client information that must be gathered and considered when planning a safe and effective strength and conditioning session

### Taught content

- Type of information
  - General – number attending, age range, gender mix, level of fitness, skill level and ability, for example, experienced, inexperienced, mixed ability, participants with low fitness
  - Individual needs – personal goals, lifestyle factors, barriers to participation, medical history and any medical conditions/medications (reasons for referral/deferral), physical activity history, physical activity preferences, disability or communication needs
  - Reasons for attending/goals and objectives – to improve fitness, skill, health, confidence, general conditioning and toning, sport specific needs. Return to play from injury
  - Factors affecting ability to exercise – injury, disease, illness, level of fitness, previous experience, psychological reasons, low self-esteem, negative body image, suitability of clothing, lifestyle factors, for example, time available, money, dependants, children, work patterns
  - Goals and objectives
    - The importance of agreeing goals and objectives, for example, to confirm understanding and ensure session meets client objectives and goals
    - To ensure goals are SMART (specific, measurable, achievable, relevant, time-bound) and meets client's needs, motivation, ability and commitment
    - Process and outcome goals
    - To assist client motivation and adherence – goals can be monitored and reviewed at regular intervals to provide regular motivational targets with rewards for achievement
    - To promote adherence – short-term, medium-term and long-term goals
    - To enable responsive and flexible work with groups and individual – modification, regression or progression of programme variables as required
- The significance of gathering information from clients
  - An integral part of the customer journey and experience
  - To educate the client regarding roles, responsibilities and role boundaries/scope of practice
  - To explain other services and products available to meet diverse client needs and goals
  - To provide relevant information to meet client needs, for example, identify different demographics, fitness levels, goals and how to best support specific and differing needs
  - To identify readiness to participate and risk stratification

## Health screening and risk stratification

### Taught content

- Information that informs health screening
  - Personal details – name, age, gender, address, contact details, preferred method of contact, emergency contact
  - Medical history and current health status – current or previous medical conditions/injuries that may affect participation, medications that may affect participation; medical conditions or medication that would necessitate exclusion or signposting to other health professionals
  - Relevant lifestyle factors – smoking, alcohol, eating behaviour, physical activity levels, time spent in sedentary behaviour (home and/or work/school)
  - Physical activity history – past and current levels of activity, past and current exercise experience and type of activity/exercise programme undertaken, sports participation, current level of conditioning.
  - Physical activity preferences – likes and dislikes
  - Reasons for exercise/activity and personal goals – improved health, weight loss, increased fitness, physical conditioning, sport specific conditioning, skill development, rehabilitation facilitation, motivation, fun and enjoyment, competition, social, physique
  - Barriers to participation – real or perceived
    - Intrinsic (self-esteem, confidence, fear, lack of motivation, lack of energy)
    - Extrinsic (family, work, time, finances)
- How any known outcomes of health and fitness assessments may impact planning
  - Health assessments and measurements – blood pressure, heart rate, height, weight, posture, Body Mass Index (BMI), waist and hip circumferences, bioelectrical impedance analysis
  - Fitness assessments and measurements – flexibility, cardiovascular, strength, endurance, balance, functional – to meet client needs, sport specific needs
  - Planning considerations – intensity, impact, exercise selection, session structure and duration of components
  - NB: Strength and conditioning trainers may not be required to conduct health and fitness assessments. Awareness of assessments is needed as some of this information may be transferred to instructors who work within a larger facility
- Consultation methods – formal, informal
  - Questionnaires – evidence-based and organisation designed
    - Evidence-based – ACSM 2014 PARQ+, PAR-Q, PARmedX and PARmedX for pregnancy (medical), IPAQ (activity levels), EQ-5D (well-being)
    - Organisation designed – health commitment statement (ukactive)
  - Observation – posture, gait, exercise alignment, facial expressions
  - Consultation – open and closed questions, motivational interviewing
  - Health assessments – blood pressure, heart rate and Body Mass Index (BMI)
  - Physical assessments and measurements – flexibility (range of motion assessment, sit and reach), muscular fitness (timed sit-up, timed press up, repetition maximum testing), cardiovascular (Rockport, Step), functional (timed sit to stand), anaerobic testing, agility testing

- Irwin and Morgan risk assessment tool – traffic light – low, medium, high risk
- Health screening tool – 2014 PAR-Q + (ACSM, 2017)
  - Clients who answer 'No' to the seven listed questions can start to become more physically active, and may participate in a health and fitness assessment. They are recommended to adhere to the international physical activity guidelines for their age ([www.who.int/diet/physical\\_activity/en/](http://www.who.int/diet/physical_activity/en/))
  - Clients over 45 and unaccustomed to regular, vigorous exercise are recommended to consult with a qualified exercise professional before participating in any vigorous type of training programme
  - Clients who answer 'Yes' to any questions need to complete additional questionnaires, which ask specific questions about a range of medical conditions, including: muscular skeletal conditions, cancer, cardiovascular conditions, respiratory conditions, mental health conditions and metabolic conditions, etc. Additional 'yes' responses to any of the subsequent questionnaires recommends that the individual completes an additional online questionnaire – the eparmed-X+.
  - Further information about the questionnaires can be obtained from the website: [www.eparmedx.com](http://www.eparmedx.com) or via email: [eparmedx@gmail.com](mailto:eparmedx@gmail.com) (ACSM. 2017)
- Health screening tool – PAR-Q (ACSM, pre 2017)
  - Ready to participate – apparently healthy, negative, 'no' responses to PAR-Q screening
  - Clients who need to be signposted to GP or health professional and who may need to take part in exercise supervised by an exercise referral instructor, specialist exercise instructor or in a clinical setting include:
    - Positive, 'Yes' response to one or more PAR-Q questions – signpost to GP
    - Contra-indications (high blood pressure, irregular heart rate) – signpost to GP
    - Multiple cardiovascular disease risk factors (CVD) – signpost to GP
    - Injuries – signpost to GP, physiotherapist, sports therapist
    - Client needs fall outside the limits of professional responsibility or competence at level 2 – refer to more experienced/specialist instructor, specific populations instructor – level 3 or level 4
  - Clients who need temporary deferral
    - Feeling unwell, minor illness (e.g. colds), minor injuries (e.g. muscle strain), excessive fatigue, unsuitable for S&C training
    - Client presents with inappropriate clothing or equipment
- The purpose and process of informed consent:
  - Purpose – to provide the client with the information they need to make an informed decision regarding their participation, to provide the client the opportunity to reflect on verbal and written information provided, to check the client's understanding, legally admissible evidence
  - Process – to explain the reasons for informed consent, inform clients of the session aims and objectives, physical and technical demands (including the types of activities planned and their relevance to goals), the benefits and risks of the assessments and exercise sessions, respond to client questions, recording signed consent, secure and confidential storage of written informed consent

- Content of informed consent record – aims, benefits, risks, responsibilities of client and instructor, record of questions and answers, date and signatures of client and instructor

## Develop effective working relationships with clients

### Taught content

- Conduct and ethics
  - Conduct themselves to portray a professional image; know own roles and responsibilities and the roles of other staff and professionals. Know relevant industry codes of conduct and ethics related to own role
  - Professional conduct – professional boundaries, scope of practice, appropriate dress/appearance, positive attitude, show respect, equal opportunities, inclusion, punctuality
- Customer needs
  - Respect for equality and diversity clients and specific needs, for example, apparently healthy adults, young people, antenatal and postnatal clients, disabled clients, protected and other characteristics (age, gender, race, nationality, ethnic or national origin, religious or political beliefs, disability, marital status, social background, family circumstance, sexual orientation, gender reassignment, spent criminal convictions)
  - Awareness of different customer needs
  - How to adapt communication to work with clients of diverse backgrounds, cultures and experience
- Importance of working relationships
  - Build rapport, value individual and diversity, mutual respect, confidence and trust, fair treatment, determine and meet client needs, establish rapport, present self and organisation positively, gain new clients (word of mouth), promote adherence, enable client to achieve goals and reach potential
- Communication skills when working with customers
  - Active listening, non-judgemental, empathy, use of open questions (as appropriate), affirming and reflective statements, accessible language, positive feedback, accurate written records, awareness of non-verbal language (body language, posture, facial expressions and voice intonation)

## Analysing information gathered

### Taught content

- Purpose of analysis
  - Identify and manage risks (risk assessment)
  - Plan a safe and effective session – appropriate for group and individuals
- Example actions if high risks (likelihood and severity) present:
  - Referral of clients who have medical conditions or multiple risk factors
  - Deferral of exercise for clients wearing inappropriate clothing or who are unwell

- Cancellation of session if environment hazards are dangerous, for example, slippery floor, chemical spillage
- Example adaptations to session structure and content in response to information analysed as low to moderate risk include:
  - In a cold environment – longer and more dynamic warm up in cold environment, shorter cool down
  - In a hot environment – lower intensity duration main session, longer cool down and stretch
  - Equipment not available or insufficient equipment for users – source other equipment or select alternative exercise station
  - Large number of participants – source a larger room or modify structure of circuit, for example, use line or command approach to assist management (travelling movements may affect safety, e.g. bumping, if too many people). In future, arrange for a booking system and arrange an additional session
  - Beginner client in advanced session – modify exercise intensity, for example, fewer repetitions, less resistance; use a training buddy to offer support during session

## Minimising any risks

### Taught content

- Check to self and clients
  - Own clothing and footwear appropriate
  - Client clothing, footwear, no chewing gum, no large jewellery, water availability
  - Ensure appropriate client screening records are available and current
  - Verbally screen clients prior to delivering session
- Checks to environment and equipment
  - Organise and check availability of equipment
  - Check safety and maintenance of equipment prior to use
  - Use safe manual handling when moving equipment (where appropriate)
  - Identified hazards and risks to be managed
  - Temperature, space, floor surface to be accounted for in planning
  - Availability of other professionals who can support with health and safety issues, for example, first aider, health and safety officer, duty manager
  - Storage of equipment
  - Organisation guidelines for reporting equipment that is faulty or requires maintenance
  - Undertake a risk assessment of the exercise environment, plan risk control measures (for example, appropriate exercise selection or alternatives, safe exercise supervision), report any issues using appropriate procedures

## LO2 Know how to plan and progress strength and conditioning sessions

### Using information gathered and analysed to plan strength and conditioning sessions

#### Taught content

All planning to meet the needs of the group and individuals

- To plan session objectives
  - Improve health-related components of fitness
    - Muscular fitness strength/endurance
    - Cardiovascular fitness
    - Flexibility
  - Improve skill-related components of fitness
    - Speed
    - Power
    - Agility
    - Balance
    - Co-ordination
    - Reaction time
  - Improve health and wellbeing
    - Reduce risk of chronic health conditions, for example, cardiovascular disease
    - Assist weight management
    - Improve body composition
    - Improve muscle tone
    - Opportunity for social interaction
    - Assist stress management
    - Improve sleep patterns
    - Higher energy levels
    - Improved confidence
    - Fun and enjoyment
  - Improved sports performance
    - Transfer of strength and conditioning training to sports performance
    - Speed, acceleration, vertical jump height in a variety of sports
    - Throwing/kicking velocity
    - Reactive agility
    - Sport-specific strength benefits
    - Injury prevention/rehabilitation
- To plan the session structure and content:
  - Duration of session and timing of components, for example, warm up, foundation movement training, resisted movements for strength and explosive power, energy system training, high intensity training, cooldown
  - Session objectives
  - Exercise selection – suitability, whole body approach, muscle balance, importance of muscular equilibrium, components of fitness trained, specific exercises, range of exercise types
  - Number of exercises
  - Exercise order
  - Timing – repetition controlled, stop watch controlled, station controlled
  - Work/rest ratios, active recovery

- Progressions, regressions, or alternatives for all exercise and stations
- Exercise intensity – use evidence-based guidelines for exercise intensity prescription and monitoring for young people
- Equipment to be used
- To prepare progressive programming for future sessions
  - Application of fitness principles, for example, specificity, overload, progression, adaptation, reversibility
  - Application of programme variables to meet client needs and goals
    - Frequency
    - Intensity – repetitions, range of motion, resistance, rate, target heart rate, impact
    - Time/duration – whole session and each component
    - Type – component of fitness trained and specific types of exercise for each component
    - Overload, specificity, progression, adaptation, reversibility, individuality, recovery time
- When planning, consideration to be given to:
  - National guidelines for physical activity – chief medical officer
  - Use of credible information sources – ACSM, NICE, UKSCA, Chief Medical Officer (CMO)
  - Importance of evidence-based practice
  - Difference between programming for fitness, health or sports performance
  - Promote adherence – build motivation, fun and enjoyment, address barriers to participation, promote client choice and autonomy, increase confidence and self-efficacy, increase competence and ability
  - Instruction style – multisensory (visual, auditory and kinaesthetic)
  - Instructional methods – explain, demonstrate, teaching position, use of questions, observation, cueing, layering of information
  - Overcoming client barriers – problem solving techniques to overcome challenges, appropriate exercise and activity selection, exercise activities (ability, fitness level, enjoyment, individual and group needs), appropriate time scheduling of exercise sessions; accurate exercise information and advice; access to childcare, social support and inclusion, exercise partners/buddies (where appropriate)

### Range of methods used when designing a strength and conditioning training session

#### Taught content

- Warm-up
  - Prepares athletes for demands of practice and competition, increases mobility and flexibility for skill execution, prevents injury, prepare physically and mentally for specific sport or athletic event, specific skill preparation and rehearsal
  - Ramp warm up principles
    - Raise
    - Activate
    - Mobilise
    - Potentiate

- Foundation movements training to promote mobility, stability, postural integrity and coordination
  - Squats
  - Lunges, including multi-planar
  - Hinge
  - Jump, including bilateral and unilateral variations
  - Quadrupedal
  - Push
  - Pull
  - Rotation
  - Running
- Resistance training
  - Muscular strength, muscular endurance, muscular power
  - Range of equipment used
    - Body weight, free weight, fixed machine, other resistance equipment (for example, sandbags, tyres), supplementary equipment
- Energy system training
  - Submaximal and maximal protocols to address participant's needs
    - Running based assessment protocols for example:
      - RAST test
      - Repeated sprint tests
      - Squash test
      - Agility T-Test
      - Agility Illinois
      - Yo-yo intermittent recovery test (IR1)
      - Hoff-Helgurud football endurance test
      - 5-0-5 test
    - Equipment based assessment protocols for example:
      - Cycle Ergometer Protocol
      - The chester step test
      - Astrand Cycle Test
      - Isometric grip strength
      - Isokinetic dynamometry (lab use)
      - 1RM
      - Wingate Test
      - Bosco jump test (jump mat required)
    - Indoor and outdoor options
    - Individual or group settings
- High intensity running based activities to develop
  - Acceleration
  - Deceleration
  - Change of direction
- Cool down exercises
  - Appropriate CV component where applicable
  - Static or range of motion/dynamic maintenance stretches for all muscles used
  - Static developmental stretches to improve flexibility

## Principles and variables of training to progress and regress strength and conditioning

### Taught content

- Definitions and associated physiological implications of each principle:
  - Specificity – the SAID principle (Specific Adaptation to Imposed Demand). The body adapts to the specific training demands placed on it, for example, stretching increases flexibility but will not affect cardiovascular fitness
  - Progressive overload – for adaption to occur the body will have to work harder than it is accustomed to. Progressive overload can be achieved by increasing the volume of work (frequency, intensity, time, type) and balancing rest and recovery time. General adaptation syndrome
  - Reversibility – the ‘use it or lose it principle’. Improvements will only be maintained if activity is continued. If training ceases, the benefits gained will be lost through gradual decline. The training volume required to maintain a fitness component is lower than that which was required to improve it
  - Adaptability – the body adapts physiologically to the specific type of challenge and overload
  - Individuality – individual factors that will affect training potential include: age, gender, heredity (genetics), body type, and physiological differences such as current flexibility, motor skills or strength
  - Recovery time – rest and recovery time are essential to prevent overtraining. Physiological adaptations occur during rest and recovery periods. Fatigue, recovery/compensation, super compensation and involution
- FITT principles
  - Frequency – how often or the number of times per week the activity will be performed
  - Intensity – how hard the activities will be in a single session
    - Cardiovascular (% HR max, use of impact, range of motion, speed of movement)
    - Muscular fitness (resistance, reps, sets, rate, range of motion, rest, complexity)
    - Flexibility (range of motion, stretch positions)
  - Time or duration – how long the activities will be performed for (whole session and each component), minutes, number of repetitions x sets x exercises
  - Type – the specific activities that will be performed
- Programme variables
  - Repetitions
  - Types of resistance
  - Rate or speed
  - Range of motion
  - Resistance (including gravity, body weight and external resistance)
  - Rest
  - NB: See American College of Sports Medicine (ACSM. 2017) for standard guidelines and application of some to different components of fitness

- Key considerations for progressing or regressing a training programme, based on analysis of individual and group needs
  - Reasons for progression – progressive overload, challenge, physiological adaptation, to improve specific fitness components
  - Reasons for regression – overtraining, inadequate recovery, over participation in competition, repetitive and boring training, consistent, high intensity, high levels of non-training stress
  - Recognising signs and symptoms of overtraining – condition and performance, psychological, movement co-ordination
  - Guidelines for prevention and recovery of overtraining, importance of rest and recovery
- Application of SMART goal setting (Specific, Measurable, Achievable, Realistic and relevant, Time-bound)
- The key differences when programming and using principles for gains in fitness or health

### **Effects of speed, levers, gravity and resistance on exercise safety and effectiveness**

#### **Taught content**

- Speed
  - Slower exercise speed enables stricter posture and more accurate alignment, muscle undergoing contraction for longer may increase time under tension and effort of resistance exercises (for example, longer time spent on concentric or eccentric phase of movement, longer time holding a position increases work of fixator muscles)
  - Faster exercise speed increases potential for injury risk, increases potential for improper posture and alignment, increase of intensity related to increase in heart rate and demand on energy systems (anaerobic)
- Levers – lever length will affect speed of movement, force generation (intensity), range of motion, torque loads
- Gravity – will affect speed and control of eccentric movements, power generation, working across gravity will reduce intensity/resistance for some muscular fitness exercises, gravity will assist some stretch positions, water-based exercise modalities decrease effects of gravity on movement (reduce weight-bearing)
- Resistance – increased resistance (weight) will increase exercise intensity and reduce speed of movement

## Planning considerations and modifications for integrating special populations into a group exercise session

### Taught content

- Health screening prior to participation to identify risks and whether deferral or signposting needed
- Adaptation and modification to exercises according to specific needs
- Older adults
  - Definition of older adult (ACSM. 2014)
    - Aged 65 and over
    - Aged 50-64 with chronic health conditions or physical limitations
  - Contra-indications – elevated resting blood pressure (check NICE or ACSM for current guidelines), resting heart rate 90bpm (check NICE and ACSM for most current boundaries); multiple CVD risk factors, combinations of symptoms of other chronic health conditions also contra-indicated, risk of falls, poor functional status
  - Safe exercise guidelines – pre-exercise health screening, refer to other professionals if required, undertake longer and more gradual mobility and warm-up, undertake a gradually tapered cool down, exercise intensity must be at a challenging but health related level, use RPE scale to monitor intensity, emphasise correct exercise technique, increase duration of transitions, simplify exercise when required, learn new exercises at the most basic level, avoid extreme spinal flexion
- Young people
  - Young people aged 11-18 who are apparently healthy can participate
  - Considerations – pre-screening to check health status. Individuals with medical conditions, including obesity require specialist interventions
  - Contra-indications – stage of growth and development, musculoskeletal injuries (growth plates)
  - Safety guidelines – wear appropriate clothing and footwear, undertake a gradual warm up and cool down, avoid heavy resistance exercises, use RPE to monitor exercise intensity, resistance training should use lighter weights and higher reps, emphasise correct exercise technique, avoid ballistic stretching, ensure adequate hydration and calorie intake

## Record and store information

### Taught content

- How to record information and appropriate records
  - PAR-Q and informed consent
  - Circuit cards/session plans
  - Health and safety checklists
  - Risk assessment forms
- Legalities – maintain client confidentiality, manage data according to data protection legislation (for example, confidential paperwork securely stored in locked filing apparatus, e-information password protected, coding system used on confidential forms instead of names), according to code of ethics
- When to share information, who with, and how to share

### LO3 Know how to instruct, supervise and review strength and conditioning sessions

#### The roles of UK and international professional bodies in strength and conditioning

##### Taught content

- UK and international professional bodies in strength and conditioning
  - UKSCA
  - NSCA
- UK sport national governing bodies
  - Sport England
  - UK sport
  - NGB's
- The values and ethical codes of practice of relevant professional bodies in strength and conditioning
- Guidelines and position statements from relevant governing bodies and or professional bodies

#### Roles and responsibilities of a strength and conditioning instructor

##### Taught content

- Plan and prepare for sessions
  - Arrive early to be available for client group
  - Welcome the clients
  - Pre-screen clients
  - Check the health and safety of the environment and equipment – working alongside others to ensure the environment and equipment are set up
  - Prepare self
  - Plan a safe and effective session structure and content
- Instruct and supervise sessions
  - Explain and demonstrate exercises
  - Maintain control of group
  - Monitor intensity
  - Observe clients and respond to needs: motivate, offer alternatives, reinforce teaching points, correct client technique
  - End the session safely and clear the environment
- Evaluate and review sessions
  - Allow time after session to answer group and individual questions
  - Gather feedback from clients and use self-evaluation
  - Review content and structure, communication and instructional methods
  - Identify strengths and areas to develop
  - Identify opportunities to improve skills though Continuing Professional Development
- The qualities a strength and conditioning instructor should demonstrate

- Friendly and approachable
- Encouraging and motivating
- Positive
- Empathetic and sensitive to others
- Non-judgemental
- Humorous
- Adaptable
- Patient
- The knowledge required
  - Anatomy and physiology
  - Principles of exercise, fitness, health and sports performance outcome measures
  - Health and safety, for example, risk assessment, manual handling, use of equipment
  - Customer care
  - Exercise safety, alignment and technique
  - Instructional skills
- Professional conduct and image
  - Appropriate clothing and attire
  - Appropriate insurances
  - Ability to manage groups
  - Awareness of equality and diversity
  - Equipment and resources prepared, for example, lessons planned with adaptations and modifications
  - Advertising and marketing own sessions, including the use of social media to promote sessions and professional CV
  - Business management – keeping accounts if self-employed
  - Awareness of organisational procedures if employed, for example, standard or normal operating procedures, duty first aider, location of fire exits, etc.
  - Professional memberships, for example, CIMSPA, REPs
  - Ability to work alongside others, for example, organise own duties alongside colleagues and clients – for example, arranging cover for classes when on holiday, etc.

## Welcome and prepare clients

### Taught content

- Welcome and greetings to build rapport with all clients in the group
- Health screening – with deferral or signposting to other professionals as appropriate
- Explain demands of session – brief overview of content, structure and level
- Check suitable clothing and footwear
- Check no chewing gum
- Check no large jewellery
- Drinking water available – location of fountain or if client own (in appropriate bottles and stacked to side of room to prevent spillage)

## Safe and effective session structure and content

### Taught content

- To meet the needs of whole group and different clients – apparently healthy, beginners, mixed ability, sport specific, etc.
- Exercises choice – full range of different exercises and equipment (where needed) for all
  - Components of fitness
  - Components of the session
- Session structure
  - Effective 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 activities
  - Cool-down

## Safe and effective alignment and technique for exercise positions

### Taught content

- All exercise positions – sitting, standing, bent-over, lying (prone, supine, side), all-fours, kneeling
- Correct alignment – neutral spine (in start positions), joint position (according to specific structure and range of movement, for example, avoidance of locking/ hyperextension and excessive unwanted/unintended movement)
- Postural and alignment cues – standing tall and upright, equal spread of body weight in exercise start position, looking forward, weight-bearing joints unlocked (soft)
- Specific technique instructions and teaching points for all exercises
  - Cardiovascular
  - Muscular fitness
  - Energy system training
  - Flexibility
- Methods of developing client coordination
  - Start with basic movements, slow speed of movement, lower intensity (impact, intensity, range of motion, reps, sets) use of layering to develop coordination
  - Progress gradually – use of layering, break the movements down into parts (starting position, phases of movement, end position), gradually build up parts of movement to whole movement, ensure movement mastery before increasing intensity

## Instructional and communication skills to observe and supervise clients

### Taught content

- Explanations (as appropriate for client needs and environment)
  - Verbal explanations – technically correct instructions, to correct poor technique, to meet individual needs, positive reinforcement and praise, feedback on performance (timely, clear, motivational, positive praise, specific, clear and concise and tailored to individual needs)
  - Voice projection – appropriate to component of session and size of group
- Visual demonstrations of movements and techniques
  - Use of mirroring, technically correct and accurate demonstrations, effective posture, safe and effective alignment of exercise positions, quality of movement, appropriate empathetic movement speed and range, use of visual reinforcement to correct alignment, for example, pointing to correct action of joint movement, using hands to press own shoulders down to indicate lengthening of neck and keeping shoulders away from ears. Smiling as a form of praise and encouragement
- Communication skills
  - Verbal communication – positive language, volume, pitch and tone, use of questions to check individual and group understanding
  - Non-verbal communication – positive body language, hand gestures, eye contact, facial expressions, active listening
  - Appropriate to client needs (for example, visual or hearing impairments, speakers of other languages), fair and equitable, personalised, new or returning clients, culturally competent interactions
  - Appropriate to environment (for example, space, layout), use appropriate methods of voice projection (noisy or busy environments), use effective volume and pitch of voice (instructions, explanations, teaching points, motivation)
- Motivational techniques
  - Appropriate to the client and exercise format
  - Positive reinforcement
  - Appropriate voice pitch and tone
  - Motivation: reward motivation, goal motivation, intrinsic self-motivation, peer-motivation, affirming statements
- Supervision skills
  - Observation of clients from different angles
  - Change of teaching positions (front, side, rear) to demonstrate and observe clients' body position and posture
- How to correct technical performance and respond to client needs
  - Use of positive and constructive feedback
  - Reinforcement of teaching points to correct technique and reinforce effective technique
  - Answer client questions
  - Other methods of correction, for example, manual/touch, with sensitivity to client, seek permission first and guide to position rather than moving limbs

## Monitoring exercise intensity and the limitations and benefits of using each method when working with clients

### Taught content

- How to recognise signs of overexertion – breathlessness, pain or discomfort, change in skin colour, loss of co-ordination, client verbal expression
- How to recognise potential signs of medical illness – asthma (wheezing); angina (chest pain), hypoglycaemia (confusion, aggression, disorientation)
- How to monitor safety – observation of exercise technique, use of equipment and behaviour in environment
- How to monitor exercise intensity and appropriateness of methods: according to client needs, experience and availability of equipment, for example, visual RPE scale, heart rate
- Rating of perceived exertion (RPE)
  - Description – visual scales against which the client describes how they perceive overall exercise intensity. Two scales devised by Gunner Borg
    - Original: 6 to 20, reflects heart rates ranging from 60-200 bpm
    - Modified category ratio 10 scale (CR10), 0 to 10\*, more familiar and user-friendly to rate numerically
  - Benefits – visual scales using the verbal descriptions of exertion should be used to provide an accurate estimate of intensity, useful when heart rate monitoring cannot be used, for example, client on beta blocker/ACE inhibitor medication or heart rate monitors don't fit
  - Limitations – needs to be explained, takes practice for individuals to become proficient. Effort perceived is subjective and individuals may misrepresent
- Heart rate monitoring
  - Description – measuring the rate at which the heart beats to determine intensity. Two methods:
    - Heart rate monitor
    - Manual pulse taking (radial artery of wrist, carotid artery of neck)
  - Calculations
    - A rough estimate of maximal heart rate with minimal calculation is the calculation:  $220 - \text{age} = \text{MHR}$
    - More accurate estimates of age predicted maximal heart rate can be calculated using the formula developed by Gellish et al.  
 $207 - (0.7 \times \text{age}) = \text{MHR}$
    - Target heart rates (THR) can be determined based on a model of training zones 50-60% Moderate aerobic zone, 60-70% Aerobic weight management zone, 70-80% Aerobic fitness improvement zone, 80-90% Peak performance zone. Guidelines have moved away from a threshold-based model but target zones can still be useful for clients
  - ACSM (2014) intensity guidelines
    - Moderate intensity – 50-65% of MHR
    - Vigorous intensity – 65-90% of MHR
    - Check revised versions of ACSM for updates and amendments
  - Benefits – use of a heart rate monitor provides an accurate, objective measurement of the body's response to exercise
  - Limitations – age-adjusted MHR is an estimate and actual MHR may be up to 11bpm higher or lower. Manual pulse taking is less accurate, monitors can be expensive, calculations required

- Observation
  - Indicators – facial expressions, skin colouring (pallor around the lips may represent reduced oxygen), posture, alignment, exercise technique, coordination, sweating
  - Benefit – easy to use, immediate assessment
  - Limitations – general indicators, no research-based validity
- Talk test
  - Description – field test for determining ventilatory thresholds. Protocols evaluate the client's ability to repeat a passage of text during exercise
    - Light activity – talking easily, breathing lightly, heart rate increased
    - Moderate activity – talking comfortably, breathing deeper and quicker, body feels warmer
    - Vigorous activity – talking more difficult, breathing heavier and deeper, shortness of breath, unable to repeat passage without hesitation
  - Advantages – simple, doesn't require any specialist equipment or specific skills to be taught
  - Limitations – subjective interpretation by tester and less accurate than other methods

### **Adapting strength and conditioning sessions to meet diverse client needs**

#### **Taught content**

- Methods of progression or regression
  - Exercise mode – bodyweight, using equipment, unloaded or loaded, sport specificity
  - Number of exercises included
  - Intensity – repetitions, sets, speed, resistance, range of motion, rest, target heart rate
  - Duration
  - Complexity of movement patterns
- Individual needs that may demand progression or regression
  - Skill
  - Fitness
  - Confidence
  - Motivation
  - Sport type
  - Special population (additional qualifications needed)
- How to communicate adaptations – empathy, sensitivity, layer content and information delivered

## **Demonstrate appropriate customer care**

### **Taught content**

- Positive image of self – timekeeping (arriving early and staying a short time after the session to be available to speak with class members before and after session), dress, hygiene, appearance, communication, professional behaviour
- Positive image of organisation – working relationship with colleagues, quality of customer care, branded uniform (if appropriate)
- Working relationship with clients – ethical, mutual respect and trust, maintain professional boundaries, fairness and equality
- Working relationship with colleagues – managers, other professionals in exercise environment
- Providing information on other services to meet client needs, for example, if self-employed – other personal services offered (e.g. sports massage); if working in larger facility as employed or casual instructor – gym or personal training, range of other group exercise sessions available, e.g. circuits, Pilates, etc.

## **Ending and reviewing sessions**

### **Taught content**

- Appropriate to clients – special requirements, level of fitness, skills level, experience,
- Appropriate to session – intensity, duration and type of activities, for example, foundation movement training, cardiovascular/energy system training, muscular fitness, high intensity training, flexibility, motor skills
- Appropriate to environment – temperature, space, time of day, intensity of session
- Provide clients with feedback – accurate summary of strengths and areas for improvement in relation to: technical performance and progress, motivation and effort, health and safety
- How to leave the environment in acceptable condition after use
  - Environment – clean, hygienic, tidy, temperature, ventilation, and lighting
  - Equipment – clean, hygienic, removed and safely stored/stacked, secure storage of equipment, used mats cleaned and stacked, other equipment returned to correct location; report and record maintenance issues/faults
- Methods of reviewing sessions with group
  - Use of open questions
  - Observation
  - Active listening
  - Summaries
  - Written questionnaires
  - Comment cards
- Gather information from group on:
  - Session content and exercise selection
  - Equipment choice (if used)
  - Exercise selection and intensity and duration
  - Individual and group performance and progress
  - Instruction methods
  - Communication methods
  - Group and individual enjoyment and satisfaction

- Use own self-evaluation
  - Session content and exercise selection
  - Group and individual feedback
  - Instruction and communication methods

## How to improve professional practice

### Taught content

- The value of reflective practice
  - To identify personal strengths
  - To identify personal areas for improvement
  - To improve professional practice and standards
  - To plan more effectively and instruct strength and conditioning
  - To meet client needs more effectively
  - To improve instructional skills
  - To progress career
  - To increase work opportunities
  - To stay responsive
  - Identify areas for personal improvement
    - Planning
    - Communication
    - Instruction
    - Motivation
- Methods of monitoring practice
  - Personal action plans
  - Personal goal setting
  - Record strengths and deficits
  - Identify Continuing Professional Development activities
- Continuing Professional Development (CPD) activities
  - Work experience
  - Working with peers
  - Shadowing other professionals
  - Mentoring
  - Workshops
  - Reading – books and industry journals, for example, Fitness Professionals (Fit Pro), Health Club Management, etc.
  - Conferences
  - Lectures
  - Higher level and/or specialist population qualifications, for example, older adults, ante/post-natal and exercise referral

## LO4 Be able to gather, analyse and use information to plan and prepare for strength and conditioning sessions

### **Collect and record appropriate safety checks to equipment and environment prior to delivering strength and conditioning sessions**

#### Taught content

- Complete a health and safety or risk assessment report for environment and equipment
- Equipment
  - All equipment available: mats, hand weights, stability equipment, kettlebells, sandbags, etc.
  - Pre-screening forms available
  - Water available
  - Organise equipment to meet client needs and planned session
  - Ensure all equipment is clean
  - Prepare alternative equipment/exercises if equipment not available or if insufficient quantity of equipment for number of clients
  - Conduct informal risk assessment and health and safety checks on all equipment to identify and manage any risks
  - Follow appropriate procedures for manual handling, lifting and passing equipment, storage of equipment, for example, ensure dumbbells are crossed so they cannot roll
- Environment
  - Conduct informal risk assessment and health and safety checks for space, temperature, ventilation, lighting
  - Identify and manage any risks
  - Know organisation procedures for:
    - Fire – location of fire exits, location of fire extinguishers, conduct for evacuation, location of meeting or assembly points, recording attendance
    - Accident or medical emergency procedure – location of duty first aider, location of first aid kits, other advisory emergency information: location of nearest office and telephone
    - Other health and safety information – correct manual handling of exercise equipment used in the circuit
- Identify hazards and manage and minimise any identified risks

## Collect information from group to identify readiness for exercise and any reasons for referral or deferral of exercise

### Taught content

- Screening of all group members
- Use of credible screening and risk stratification tools
- Own information gathering, for example, consultation with clients individually or verbal screening
- Use of information passed from others, for example, if instructing in a sport and leisure facility or exercise referral environment; if covering an exercise session this information may be transferred
- Analyse client information and identify any special considerations or reasons for referral or deferral of exercise
- Clients ready to participate
  - Apparently healthy, negative, 'No' responses to PAR-Q
- Clients who need to be signposted or referred other professionals
  - Positive, 'Yes' response to one or more PAR-Q questions – signpost to GP
  - Contra-indications (high blood pressure, irregular heart rate) – signpost to GP
  - Multiple cardiovascular disease risk factors (CVD) – signpost to GP
  - Injuries – signpost to GP, physiotherapist, sports therapist
  - Client needs fall outside the limits of professional responsibility or competence at level 2 – refer to more experienced/specialist instructor, S&C coach, specific populations instructor – level 3 or level 4
- Clients who need temporary deferral:
  - Feeling unwell, minor illness (e.g. colds), minor injuries (e.g. muscle strain), excessive fatigue
  - Client presents with inappropriate clothing or equipment
- Gain informed consent to participate
  - Completion of informed consent record
  - Explained to client
  - Signed and dated

## LO5 Be able to plan and progress strength and conditioning sessions

### **Plan a strength and conditioning session, covering all components of fitness to meet the needs and physiological goals of the group**

#### Taught content

- Session objectives listed, for example, improve fitness, health related fitness, sports performance
- Type of session
- Group skill and fitness, for example, mixed ability or beginner, etc.
- Detailed lesson plans listing:
  - Component of session and aim of component, for example, RAMP warm up for preparation
  - Duration of component
  - Exercise names and descriptions, for example, lunges, jump squat, speed and change of direction activities
    - List of repetitions, sets, tempo, rest where appropriate
    - Length of hold, for example, for static stretches and reference to type of stretch, e.g. preparatory, maintenance, development
  - Teaching points for all exercises
  - Alternatives, adaptations and modifications to meet specific needs
  - Progressions for all exercises
- Safe and effective session structure and content (appropriate to needs, goals and level of fitness of group and individuals)
  - Effective RAMP warm up protocol
  - Foundation movements to promote mobility, stability, postural integrity and coordination
  - Strength based training and explosive activities
  - Energy system training
  - Submaximal and maximal protocols to address participants' needs:
    - Running based
    - Equipment based
    - Indoor and outdoor options
    - Individual or group settings
  - High intensity running-based activities to develop
    - Acceleration
    - Deceleration
    - Change of direction
  - Cool down component
- Apply appropriate methods and techniques to facilitate desired goals for group and individuals
- Progressive principles and variables applied in relation to goals, needs and level of fitness
- Programme recorded using an appropriate format, e.g. session plan
- Consider how the planned session structure, selected exercises and equipment meets group and individual needs, goals and preferences
- Provision of credible information and guidance within own scope of practice

## LO6 Be able to instruct, supervise and review strength and conditioning sessions

### Prepare self to instruct strength and conditioning sessions

#### Taught content

- Professional image and self-presentation
  - Appropriate attire and footwear
  - Personal hygiene and appearance
  - Positive first impression, for example, smile, meet and greet, say 'hello'
  - Punctuality – arrive early
  - Behaviour and language
  - Organised
  - Polite
- All resources and equipment available

### Welcome and verbally screen clients to check their readiness to participate

#### Taught content

- Use of appropriate communication skills
- Help clients feel welcome and at ease
- Verbal screening to check client readiness to exercise
  - Refer or defer, if required (with sensitivity and clarity)
- Discuss purpose, value and demand of exercises:
  - 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 activities
  - Cool down component
- Modify plans and planned session according to individual or group feedback, needs and preferences or concerns from individuals, for example, specific needs

## Instruct a safe and effective warm up component to strength and conditioning

### Taught content

- Structure – RAMP
- Raise
  - Appropriate for group and individuals
  - Appropriate for environment – temperature and space
  - Appropriate intensity
  - Appropriate movement patterns
- Activate and mobilise
  - Appropriate for group and individuals
  - Appropriate to selected movement patterns
  - Appropriate for environment – temperature and space
  - Appropriate activation and mobilisation of muscle groups and joints respectively
- Potentiate
  - Appropriate shift in activities and intensity
  - Appropriate for environment – temperature and space
  - Appropriate choice of activity to enhance aims of the session
- Effective instruction and communication skills
  - Demonstration and explanation – technically accurate, safe and effective
  - Teaching points and reinforcement
  - Alternatives and adaptations for progression and regression (as appropriate to group and individual needs), for example, manipulation of FITT principles
  - Observation of client technique and alignment to maximise safety and effectiveness
  - Correction – with sensitivity, for example, reinforcement of teaching points, eye contact, etc.
  - Teaching position to enhance observation and correction
  - Monitoring safety and intensity
  - Motivation and encouragement
- See LO4

## **Instruct a safe and effective foundation movement component to the client's needs**

### **Taught content**

- Demonstrate safe and effective foundation movement training exercises
  - Squat
  - Lunge, including multi-planar
  - Hinge
  - Jump, including bilateral and unilateral variations
  - Quadrupedal
  - Push
  - Pull
  - Rotation
  - Running

## **Instruct a safe and effective strength, explosive, energy system and high intensity running based activities**

### **Taught content**

- Demonstrate
  - Safe and effective strength based training and explosive activities
  - Safe and effective energy system protocols
  - Safe and effective high intensity running based activities
- Appropriate for
  - Group and individuals
  - Environment – temperature and space
  - Equipment – mats, exercise bands, hand weights, etc. (as needed)
  - Intensity, repetitions, rate, range of motion, rest
- Demonstrate effective instruction and communication skills
  - Demonstration and explanation – technically accurate, safe and effective
  - Teaching points and reinforcement
  - Alternatives and adaptations for progression and regression (as appropriate to group and individual needs), for example, manipulation of FITT principles
  - Observation of client technique and alignment to maximise safety and effectiveness
  - Correction – with sensitivity, for example, reinforcement of teaching points, eye contact, etc.
  - Teaching position to enhance observation and correction
  - Monitoring safety and intensity
  - Motivation and encouragement

**Instruct a safe and effective cool down and stretch component that is appropriate to the client, programme and environment**

Taught content

- Appropriate for group and individuals
- Appropriate for environment – temperature and space
- Stretch muscles – maintenance and developmental, all muscles used in session
- Appropriate stretch positions
- Whole body approach – all muscles used in session to be stretched
- Appropriate equipment – mats, exercise bands, hand weights, etc. (as needed)
- Appropriate intensity, repetitions, rate, range of motion
- Effective instruction and communication skills
  - Demonstration and explanation – technically accurate, safe and effective
  - Teaching points and reinforcement
  - Alternatives and adaptations for progression and regression (as appropriate to group and individual needs), for example, manipulation of FITT principles
  - Observation of client technique and alignment to maximise safety and effectiveness
  - Correction – with sensitivity, for example, reinforcement of teaching points, eye contact etc.
  - Teaching position to enhance observation and correction
  - Monitoring safety and intensity
  - Motivation and encouragement

**Demonstrate appropriate communication and instructional skills to lead and manage the group**

Taught content

- Appropriate cueing for each component – visual and verbal cues
- Explanations and demonstrations appropriate for group and individual needs
  - Verbal explanations – clear and concise
  - Visual demonstrations – safe and effective alignment, visible to whole group
- Voice projection and tone appropriate for component of session
- Observation of clients from different angles and teaching positions
- Appropriate use of correction – reinforcement of teaching points; eye contact with individuals, changing position to move closer to individuals; use of touch correction (with permission and consideration to sensitivity)
- Respond to client needs – alternatives, corrections, modifications
- Motivation – use of praise and encouragement, appropriate to component and appropriate to group and individual needs
- See LO3

### **Monitor exercise safety and intensity and respond to meet group and individual needs**

#### **Taught content**

- Methods – observation, questions, RPE, talk test, heart rate monitoring
- Method appropriate for group and individual
- Method appropriate for component
- Recognise signs of overexertion: breathlessness, pain or discomfort, change in skin colour, loss of co-ordination, client verbal expression
- Respond appropriately to the needs of the group and individuals, for example, adapt intensity, modify exercises, offer rest, change exercise – position, speed, intensity, etc.
- See LO3

### **Leave the environment in acceptable condition for other users**

#### **Taught content**

- Environment – clean, hygienic, tidy, temperature, ventilation, and lighting
- Equipment – safely stored/stacked, mats cleaned after use, report and record maintenance issues/faults
- See LO3

### **Gather information to evaluate and review a group exercise session**

#### **Taught content**

- Information sources – group, other teachers and peers, self
- Evaluate and review
  - Session content and exercise selection
  - Enjoyment and satisfaction of individuals and group
  - Communication skills
  - Motivational skills
  - Health and safety
- Reflect on information gathered to identify
  - Strengths
  - Deficits or areas to improve
  - Ways to improve personal practice
- Create an action plan to improve personal practice
  - Activities to assist development, for example, reading, workshops, mentoring
  - Purpose of activities to increase skills and/or knowledge
- See LO3

# Assessment requirements

## 1. Knowledge outcomes

| Learning Outcome  | Assessment Criteria  | Assessment requirement |
|---|--|------------------------|
| LO1 Know how to gather and analyse information to plan and prepare for strength and conditioning sessions | 1.1 Describe the information that needs to be gathered and analysed to plan and prepare for strength and conditioning sessions               | Portfolio of evidence  |
|   | 1.2. Outline safe and effective environments for strength and conditioning sessions  |                        |
|   | 1.3. Identify the equipment used for strength and conditioning sessions  |                        |
|   | 1.4. Identify the information that must be gathered from clients to enable planning of safe and effective strength and conditioning sessions |                        |
|   | 1.5. Describe the methods for health screening, risk stratification and informed consent   |                        |
|   | 1.6. Describe how to develop effective working relationships with clients  |                        |
|   | 1.7. Describe how to analyse information   |                        |
|   | 1.8. Describe how to minimise any risks  |                        |

| Learning Outcome   | Assessment Criteria  | Assessment requirement |
|--|--|------------------------|
| LO2 Know how to plan and progress strength and conditioning sessions | 2.1. Outline how to use the information gathered and analysed to plan strength and conditioning sessions                       | Portfolio of evidence  |
|  | 2.2. Describe the range of methods used when designing a strength and conditioning training session                            |                        |
|  | 2.3. Describe how to apply the principles and variables of training to progress and regress strength and conditioning sessions |                        |
|  | 2.4. Outline the effects of speed, levers, gravity and resistance on exercise safety and effectiveness                         |                        |
|  | 2.5. Describe the planning considerations and modifications for integrating special populations into a group exercise session  |                        |
|  | 2.6. Describe how to record and store information  |                        |

| Learning Outcome  | Assessment Criteria   | Assessment requirement |
|---|---|------------------------|
| LO3 Know how to instruct, supervise and review strength and conditioning sessions | 3.1. Describe the roles of UK and international professional bodies in strength and conditioning  | Portfolio of evidence  |
|   | 3.2. Outline the roles and responsibilities of a strength and conditioning sessions instructor  |                        |
|   | 3.3. Describe how to welcome and prepare clients  |                        |
|   | 3.4. Outline the safe and effective session structure and content   |                        |
|   | 3.5. Describe safe and effective alignment and technique for exercise positions   |                        |
|   | 3.6. Describe appropriate instructional and communication skills to observe and supervise clients   |                        |
|   | 3.7. Outline the different methods of monitoring exercise intensity and the limitations and benefits of using each method when working with clients |                        |
|   | 3.8. Describe the methods for adapting strength and conditioning sessions to meet diverse client needs  |                        |
|   | 3.9. Describe how to demonstrate appropriate customer care  |                        |
|   | 3.10. Describe how to end and review sessions   |                        |
|   | 3.11. Describe ways to improve their professional practice  |                        |

### Portfolio of evidence

There must be evidence that the learners possess all the knowledge and understanding listed in the knowledge section of the unit specifications. The knowledge content in LO1 – LO3 will be evidenced in the portfolio of evidence.

The portfolio of evidence must include formative planning and assessment records to evidence that learners have:

- Demonstrated exemplary customer service
- Prepared the environment and equipment and completed health and safety checks
- Collected information from clients – verbal and written screening
- Planned and Instructed all components of a strength and conditioning sessions session
- Planned and instructed strength and conditioning sessions for all components of fitness
- Worked with different client groups
- Reviewed and evaluated their planning and instruction of a group exercise to exercise session

It is recommended that a full range of formative assessments are completed prior to learners undertaking the summative practical assessment. Summative assessment records may be included as part of the portfolio.

Learners must be competent to plan, prepare and instruct different sessions. The portfolio of evidence should contain evidence to demonstrate that learners have:

- Demonstrated all components of strength and conditioning sessions
  - RAMP warm up
  - Foundation movements
  - Strength based training and explosive activities
  - Energy system protocols
  - High intensity running based activities
  - Cool down
- Demonstrated exercises for relevant components of fitness
  - Cardiovascular fitness
  - Speed
  - Power
  - Agility
  - Balance
  - Co-ordination
  - Reaction time
- Worked with all client groups
  - Beginners
  - Mixed ability
  - Experienced
- Covered a minimum of 2 client objectives
  - Improve fitness
  - Improve performance
  - Rehabilitation and reconditioning
  - Address barriers to participation
  - Improve skills and techniques
  - Improve health
  - Fun and enjoyment

- Carried out all risk assessment checks
  - Clients
  - Environment
  - Space
  - Layout
  - Temperature
  - Flooring
  - Lighting
  - Ventilation
  - Equipment
  - Clothing and footwear
- Used all instructional methods
  - Technically accurate demonstrations
  - Changing teaching position
  - Asking questions
  - Making adaptations/progressions
  - Verbal and visual communications
  - Mirroring
  - Correcting poor technique (group and individuals)
  - Providing and reinforcing teaching points to meet individual needs

## 2. Practical observations

| Learning Outcome  | Assessment Criteria   | Assessment requirement                   |
|---|---|--|
| LO4 Be able to gather, analyse and use information to plan and prepare for strength and conditioning sessions | 4.1. Collect and record appropriate safety checks to equipment and environment prior to delivering strength and conditioning sessions | Client consultation and planning records |
|   | 4.2. Collect information from group to identify readiness for exercise and any reasons for referral or deferral of exercise           |  |

| Learning Outcome  | Assessment Criteria  | Assessment requirement                   |
|---|--|--|
| LO5 Be able to plan and progress strength and conditioning sessions | 5.1. Plan a strength and conditioning session, covering all components of fitness to meet the needs and physiological goals of the group | Client consultation and planning records |

| Learning Outcome   | Assessment Criteria   | Assessment requirement         |
|--|---|--------------------------------|
| LO6 Be able to instruct, supervise and review strength and conditioning sessions | 6.1. Prepare self to instruct strength and conditioning sessions  | Practical summative assessment |
|  | 6.2. Welcome and verbally screen clients to check their readiness to participate  |                                |
|  | 6.3. Instruct a safe and effective strength and conditioning sessions   |                                |
|  | 6.4. Instruct a safe and effective main session that is appropriate to the client's program and environmental needs                   |                                |
|  | 6.5. Instruct a safe and effective cool down and stretch component that is appropriate to the client, programme and environment needs |                                |
|  | 6.6. Demonstrate appropriate communication and instructional skills to lead and manage groups and individuals                         |                                |
|  | 6.7. Monitor exercise safety and intensity and respond to group and individual needs  |                                |
|  | 6.8. Leave the environment in an acceptable condition for other users   |                                |
|  | 6.9. Gather information to evaluate and review strength and conditioning sessions   |                                |

## Client consultation and planning records

The content of LO4 – LO5 are covered by written planning records. This includes:

Health and safety checklist (including screening records and any risk assessments to equipment and environment)

Detailed session plan covering all components of fitness and session components – to include: aims of component; exercise description (diagrams can be used) including number of repetitions of timing and type of stretching (developmental/maintenance); teaching points; alternatives, progressions and regressions. Circuit cards should be produced to facilitate the practical summative assessment.

Learners must gather and analyse information about the environment, equipment and group of clients and plan a strength and conditioning session. All planning records will be marked by centre assessors.

The planning records must be for the session to be instructed for the practical summative assessment.

Where evidence does not naturally occur within the practical skills assessments, assessors may use oral questioning or planned professional discussion as supplementary evidence to ensure all knowledge-based assessment criteria are covered. All questions and/or professional discussions should be recorded.

## Practical summative assessment

The content of LO6 are covered by a summative practical assessment and written self-evaluation of the session.

Learners must prepare for, deliver and review a strength and conditioning session which will be observed and marked by centre assessors. Practical assessment of outcomes and learning development requirements (preparing and delivering Strength and Conditioning sessions) must be overseen by someone who has demonstrated their own subject matter expertise as an Accredited Strength and Conditioning Coach (ASCC).

The summative practical assessment must take place in a real or realistic working environment with, as far as possible, a real client or group of clients. The session instructed should contain RAMP warm up, foundation movements, strength based training and explosive activities, energy system protocols, high intensity running based activities and cool down. The session must be appropriate for the group and or individual needs and listed objectives.

Where evidence does not naturally occur within the summative practical assessment (e.g. preparing self), assessors may use oral questioning or planned professional discussion as supplementary evidence to ensure all knowledge-based assessment criteria are covered. All questions and/or professional discussions should be recorded.

All skills-based criteria (6.2. – 6.8.) instructional skills MUST be directly observed by assessors. Questions can be used to supplement and provide additional evidence but cannot replace observation as the assessment method.

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# Resources

The special resources required for this unit are access to a real or realistic working environment which supports the planning and instruction of group strength and conditioning sessions to real or realistic client groups.

## Document History

| Version | Issue Date | Changes  | Role                           |
|---------|------------|--|--------------------------------|
| v1.0    | 14/08/2020 | First published  | Product and Regulation Manager |
| v2.0    | 16/09/2020 | Text amended in LO6 to reflect strength and conditioning | Qualification Administrator    |
|         |            |  |                                |