

# **CIMSPA PROFESSIONAL STANDARD**

# Graduate Strength and Conditioning Coach

(FULL STANDARD)

EDITION: V1.2

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# CIMSPA PROFESSIONAL STANDARD: Graduate Strength and Conditioning Coach

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### **ABOUT THIS STANDARD**

This document is a CIMSPA professional standard (full version).

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## Overview

## **Professional standard: Graduate Strength and Conditioning Coach**

This professional standard outlines the role and scope of a Graduate Strength and Conditioning Coach and the essential knowledge and skills that are needed to meet the requirements of practitioner membership with CIMSPA.

The full version of this standard is available to CIMSPA education and employer partners. It provides guidance for the development of educational products that will be endorsed by CIMSPA and the UK Strength and Conditioning Association (UKSCA).

The Strength and Conditioning Trainer sits in the sport and physical activity sector however, this standard can be adopted by multiple professions as it recognises a general skillset covering movement for sports performance and encourages the physical development and wellbeing of youth and general adult populations.

Note: parts of this professional standard will refer to the Graduate Strength and Conditioning Coach within the context of a wider *support team*; however, this is also a *stand-alone* role. Thus, implications for a multi-disciplinary environment may be considered where appropriate.

## **Endorsed qualification logo**

Qualifications that meet the requirements of this CIMSPA professional standard will display this official CIMSPA endorsement logo.



# 2. Scope of the Graduate Strength and Conditioning Coach

A Graduate Strength and Conditioning Coach will improve a participant's experience of sport and physical activity by providing specialised support and guidance aligned to their individual needs. All this is provided within the context of the physical preparation for a performance-orientated goal. In summary:

- Graduate Strength and Conditioning Coaches support individuals and groups to achieve their
  performance-orientated goals by leading or assisting on the planning, preparation, delivery,
  continuous evaluation, review and adaption of strength and conditioning programmes. These
  programmes should be underpinned by scientific principles, evidence-based research and the
  athlete's needs.
- Graduate Strength and Conditioning Coaches that meet this standard will be able to work with a
  broad range of healthy and injured individuals (e.g. elite and recreational athletes, youth, adults,
  disabled, etc.) all of whom will require different needs in different types of environments.
- They ensure the culture and environment is designed to meet an individual's and/or group's
  welfare needs and allow them the opportunity to achieve their goals and meet their aspirations.
  This means tailoring to the specific needs and requirements as part of a collaborative and
  iterative process and understanding the risk versus reward conundrum as and when appropriate.
- They may work independently or as part of a multi-disciplinary team, which may include technical coaches, sport scientists, physiotherapists, nutritionists, psychologists and medical specialists.
   As such, they are aware of when to seek specialist advice, work collaboratively and when to refer individuals to the relevant appropriate professionals.

# 3. CIMSPA membership eligibility

Graduates of this standard will meet the requirements to be a CIMSPA practitioner member. They will:

#### **UNDERSTAND**

- The underpinning science behind training adaptation and recovery, so that effective strength and conditioning training programmes can be planned, prepared, delivered, continuously evaluated, reviewed and adapted (through appropriate testing and monitoring), when required.
- How to work with individuals in any sport or activity, of any age or sex, over a period of time (e.g. a minimum of three months) sufficient to show improvements in relation to the individuals' performance-orientated goals.
- How to safely and effectively coach individuals through a range of weightlifting, strength,
  plyometric, agility, speed, aerobic, anaerobic, flexibility, and mobility exercises as part of the
  overall performance enhancement process.

### **HAVE DEMONSTRATED**

- Competency in understanding underpinning theory required for a Graduate Strength and Conditioning Coach and its application to performance enhancement.
- Competency of leading planning, preparation, delivery, continuous evaluation, and review of a strength and conditioning programme, which is underpinned by scientific principles, over a period of time (e.g. minimum of three months) sufficient to achieve an individual's performanceorientated goal.
- Competency when safely and effectively coaching a range of weightlifting, resistance, plyometric, speed, agility, aerobic, anaerobic and mobility training exercises.

# 4. Summary of knowledge and skills

# **Graduate Strength and Conditioning Coach**

Topic	Knowledge	Skills
The Graduate Strength and Conditioning Coach within an organisation and sector	<ul> <li>How to provide and work under appropriate supervision, and within professional boundaries.</li> <li>How to influence and manage stakeholders that support the overall performance enhancement process.</li> <li>Explain why they are a Graduate Strength and Conditioning Coach, the need to have a strength and conditioning coaching philosophy, and the broader impact strength and conditioning coaching can have upon individuals and groups.</li> </ul>	<ul> <li>Work within professional boundaries using skills such as:</li> <li>Appropriate supervision of strength and conditioning coaching assistants.</li> <li>Problem solving.</li> <li>Time management.</li> <li>Appropriately interpreting information.</li> <li>Using own initiative.</li> <li>Influence and manage (where appropriate) stakeholders that support the overall performance enhancement process, through the use of collaboration, effective communication, creativity and critical thinking.</li> </ul>

### Topic Knowledge Skills

# Professional strength and conditioning practice

- Recognise good practice for strength and conditioning coaches in the industry through professional ethics, values and appropriate legislation such as data protection and confidentiality in order to support the health, safety, and welfare of participants and others (in line with either the relevant employer organisation for those working as part of a multi-disciplinary team or the UK's professional body for strength and conditioning if working as an individual).
- How to develop themselves, and any multi-disciplinary team, by maintaining a high-level of relevant knowledge through a range of pathways and regular related professional development.
- Understand how to conduct themselves and portray a professional image:
  - Respectful of participants and other professionals.
  - Positive.
  - Honest.
  - Empowering.
  - Motivating.
  - Trustworthy.
  - Committed.
  - Consistently non-judgemental.
  - A good role model with professional personal conduct and integrity.
- Be able to explain professional ethics related to being a Graduate Strength and Conditioning Coach, including:
  - Duty of care.
  - Professional membership.
  - Role boundaries/scope of practice and responsibilities
  - Representation of skills, abilities, and knowledge.
  - Interface with other relevant professionals, business practices and professional code of conduct.

### Provide a high-quality participant centred service through excellence in the strength and conditioning coaching environment and the application of best practice in areas such as developing relationships,

 Demonstrate lawfulness, tact, and discretion when handling participant data.

duty of care, and risk management.

 Develop their own skills through a range of mechanisms and regular related professional development.

### Topic Knowledge Skills

Working within a multidisciplinary team (when working in such an environment)

- How the strength and conditioning coach's role and responsibilities as part of a multi-disciplinary team can support the effective operation of the overall performance enhancement process.
- How the various roles (e.g. sports coach, physiotherapist, nutritionist, psychologist, doctor, etc.) within the multi-disciplinary team positively contribute to the overall performance enhancement process.
- Knowledge of the skills required and parameters of various roles (e.g. sports coach, physiotherapist, nutritionist, psychologist, doctor, etc.) within the multi-disciplinary team, including limits of own disciplinary knowledge in line with policies and procedures.
- Understand the necessity for a collaborative and agreed approach from all parties towards the performance-orientated objective(s).

 Able to work within professional boundaries of practice as both an individual and as part of a multidisciplinary team to provide a safe, engaging, and effective strength and conditioning programme as part of the overall performance

enhancement process aligned to the

individual's performance-orientated

goal.

- Demonstrate diligence regarding the scope of practice, working with other members of the multi-disciplinary team or appropriately qualified practitioners as appropriate.
- Ability to communicate in an appropriate, effective and professional manner to the individual and multi-disciplinary team at all times, as appropriate.

#### **Topic**

programmes

# Plan, prepare, deliver, continuously evaluate, adapt and review strength and conditioning

### Knowledge

- Knowledge of physiological function, anatomy, biomechanics, psychology, skill acquisition, pedagogy, injury prevention and physical development across the lifespan.
- How to undertake an effective, multidisciplinary needs analysis of the physical demands of a sport or a performance activity in relation to the individual's performanceorientated goal.
- How to identify, conduct, and interpret performance testing relevant to the needs of the sport or performance activity, as well as the individual's performanceorientated goal.
- Knowledge of planning and programming theory in relation to optimising short, medium, and longterm performance-orientated goals.
- How to safely and effectively apply a wide range of strength and conditioning training methods to enhance physical performance, including identifying the technical requirements of skill development as appropriate to the coached activity.
- How to apply a wide range of monitoring techniques to inform the continuous evaluation and periodic review of strength and conditioning practice.
- Knowledge of existing and up-todate research relating to the sport, activity or individual's needs.

#### **Skills**

- Demonstrate competence when collecting, interpreting, and utilising performance testing data to inform the overall performance enhancement process.
- Plan and effectively deliver a strength and conditioning programme, sufficient to achieve an individual's performance-orientated goal using appropriate equipment and methods, regardless of sport, activity, or age.
- Ability to identify errors in exercise technique and apply corrective strategies as appropriate via a variation of pedagogical interventions.
- Continuously evaluate and periodically review the effectiveness of the strength and conditioning programme in relation to the individual's performance-orientated goal and physical abilities, adapting the strength and conditioning programme cognisant of such information and still in line with the performance-orientated goal.
- The ability to critique and disseminate useful and appropriate information from research and evidence-based literature to help inform strength and conditioning practice, where appropriate.

# Maximise the participant experience

- How to engage, communicate, obtain feedback, and support participants in the safe fulfilment of strength and conditioning activities.
- How to have a participant centred approach to strength and conditioning coaching.
- How to maximise the participant experience through understanding their needs to support participant retention.
- How the customer service elements combined will lead to the overall participant experience.

- Create positive and lasting first impressions.
- Develop relationships with participants through excellent communication skills, technical knowledge, and acting on feedback to enhance the participant experience.
- Show excellence in a participant centred approach to strength and conditioning coaching, demonstrating the ability to retain participants through a strength and conditioning programme.

Topic	Knowledge	Skills
Welfare of participants and providing a safe and inclusive strength and conditioning coaching environment	<ul> <li>How to understand the welfare needs and positively manage participant behaviours.</li> <li>How to prepare safe activity areas and how to safely set up, dismantle, and store equipment; reducing the risk of physical injury to anyone in the strength and conditioning environment.</li> <li>Confidentiality legislation in regard to the participant/coach relationship.</li> <li>Knowledge of referral pathways to ensure the most appropriate duty of care at all times for the participant.</li> </ul>	<ul> <li>Organise own work tasks alongside colleagues to ensure a positive, safe, and inclusive learning environment.</li> <li>Ensure participant welfare needs are met and ensure the positive management of behaviour.</li> <li>Demonstrate the ability to complete risk assessments (if required).</li> <li>Demonstrate the ability to seek specialist advice, refer out, work collaboratively and/or enrol on relevant training programmes to ensure upmost duty of care is being delivered at all times.</li> </ul>
Industry legislation and guidance, organisational policies, and procedures	<ul> <li>What legislation and organisational policies and procedures are relevant for strength and conditioning coaches.</li> <li>How relevant industry legislation and organisational policies and procedures impact on a strength and conditioning coach's day-to-day role and responsibilities.</li> </ul>	Adhere to relevant industry legislation and organisational policies and procedures in line with organisational guidelines and best professional practice.

# 5. Product development guidance

This section is aimed at organisations developing educational products mapping to this professional standard. The requirements should be taken into account in the development of all educational products seeking CIMSPA endorsement.

The CIMSPA Professional Development Board (PDB) has agreed that any of the following educational products can be developed for the role of Graduate Strength and Conditioning Coach:

Educational product	Mapping requirements	Professional standard achieved on attainment?
Regulated vocational qualification	Fully mapped	YES
Apprenticeship programme	Fully mapped	NO
HE programme/modules	Fully mapped	YES

Where evidence that of all elements of the professional standard are included CIMSPA endorsement can be sought.

All educational products must be submitted to CIMSPA for endorsement and should include all elements outlined in the professional standard and assessed in line with the intention of the standard.

Awarding organisations and higher education institutions seeking CIMSPA endorsement for a product against this professional standard are asked to consider the following:

a) They determine and justify the level of the product they have developed, in line with the regulator's guidance. To ensure parity, the level for all educational products that fully map to this professional standard should be the same.

The level assigned is determined by leading awarding organisations currently offering qualifications in the sector in which the role resides.

This is not a first-to-post exercise but one in which awarding organisations and higher education institutions are invited to submit their levelled units/full qualification for review as part of the CIMSPA endorsement process.

Once agreed by CIMSPA, all subsequent fully mapped educational products must conform to the level set for this professional standard.

Level descriptors set out the generic knowledge and skills associated with the typical holder of a qualification at a given level and it should be ensured that educational products fully mapping to this professional standard are a 'best-fit' for the level assigned.

b) They determine the total qualification time for the qualification/unit and outline the minimum requirements for practical assessment.

For the role of Graduate Strength and Conditioning Coach, products should utilise a blended learning approach and methods of assessment which must include face-to-face assessment, practical demonstrations and case studies.

They stipulate that within a case study, sufficient time (e.g. three months minimum) between engaging a participant and final assessment needs to be allowed to show progress in relation to an individual's performance-orientated goal. They also stipulate practical assessment must be conducted in a suitable facility, fulfilling minimal equipment standards and assessed by someone who has demonstrated their own subject matter expertise as an Accredited Graduate Strength and Conditioning Coach (ASCC).

c) Their quality assurance meets the appropriate regulator's guidance, including; internal and external quality assurance, staffing requirements and assessment generation and evidence.

# 6. Learning and development requirements (LDRs)

The LDRs outline the key areas of learning and assessment that should be contained within any educational product seeking CIMSPA endorsement against a professional standard. There are seven key areas of learning and development for the job role of Graduate Strength and Conditioning Coach, of which all areas are interconnected and mandatory. The key areas are:

- 1. The Graduate Strength and Conditioning Coach within an organisation and sector.
- 2. Professional strength and conditioning practice.
- 3. Working within a multi-disciplinary team (as appropriate).
- 4. Plan, prepare, deliver, continuously evaluate, review and adapt strength and conditioning programmes.
- 5. Maximise the participant experience via effective coaching methodologies.
- 6. Welfare of participants and providing a safe and inclusive strength and conditioning coaching environment.
- 7. Industry legislation and guidance, organisational policies, and procedures.

Note: Examples are given within the LDRs to provide an overview of the knowledge and skills most relevant to the role. It is not mandatory to assess learners against 100% of the examples provided; however, sufficient coverage to ensure occupational competence on achievement must be ensured. This will be reviewed as part of the joint CIMSPA/UKSCA endorsement process.

# 1. The Graduate Strength and Conditioning Coach within an organisation and sector

Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:
K1.1	Supervision	<ul> <li>Evaluate and distinguish the role of supervision, mentoring and leadership from both coach and athlete perspectives.</li> </ul>
		<ul> <li>Understand professional boundaries and how these can become compromised.</li> </ul>
K1.2	Stakeholders	Awareness of the various roles of key stakeholders and how they influence the performance enhancement process.
		<ul> <li>Awareness of contextual factors (e.g. institutional and economic) influencing the delivery and organisation of strength and conditioning services.</li> </ul>
		<ul> <li>Understand and justify how to effectively communicate and reason.</li> </ul>
		Understand the tools of effective management.
K1.3	Coaching, philosophy, and broader impact	<ul> <li>Understand the coaching process and evaluate its impact on the performance-orientated goal.</li> </ul>
		<ul> <li>Explain the importance of possessing a sense of professional identity and self-definition that has consistency and cohesion over time.</li> </ul>
		<ul> <li>Recognise and understand the process of creating and developing a coaching philosophy.</li> </ul>
		<ul> <li>Explain the importance of strength and conditioning and its impact on the performance enhancement process, as well as the wider health related implications to the athlete and within the multi-disciplinary team (where applicable).</li> </ul>
Ref	Skills:	A Graduate Strength and Conditioning Coach must be able to:
S1.1	Professional boundaries	Demonstrate behaviours aligned with appropriate concepts of supervision, mentorship and leadership in the appropriate context.
		<ul> <li>Ability to act in the best interest of the participant(s) and within our legal and professional boundaries.</li> </ul>
		<ul> <li>Communicate effectively with participants and the wider multi- disciplinary support team.</li> </ul>

Ref	Skills:	A Graduate Strength and Conditioning Coach must be able to:
S1.2	Stakeholders	<ul> <li>Engage with the implementation of policy within localised context.</li> </ul>
		<ul> <li>Implement goal setting strategies as part of the performance enhancement process.</li> </ul>
		<ul> <li>Communicate and reason effectively with key stakeholders through a multitude of communication pathways.</li> </ul>
		<ul> <li>Facilitate teamwork and collaboration to provide sustainable solutions as part of the performance enhancement process.</li> </ul>

# 2. Professional strength and conditioning practice

Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:
K2.1	Professional ethics, values, and appropriate legislation	<ul> <li>Recognise and understand the principles and applications of scientific enquiry and research.</li> </ul>
	appropriate regionation	Understand the importance of ethical and professional behaviou
		<ul> <li>Explain a range of ethical and professional values, including relevant industry codes of professional conduct/ethics.</li> </ul>
		<ul> <li>Know how to conduct themselves and portray a professional image.</li> </ul>
		<ul> <li>Evaluate when to challenge those not conducting themselves in an ethical and professional manner.</li> </ul>
K2.2	Professional development	<ul> <li>Understand the importance of continued professional development.</li> </ul>
		<ul> <li>Awareness of the mechanisms available to facilitate professional development.</li> </ul>
		<ul> <li>Understand how to keep knowledge, understanding and skills up to date.</li> </ul>
		<ul> <li>Know the relevant guidelines relating to Continued Professional Development.</li> </ul>
		<ul> <li>Know how to work within the boundaries of own professional knowledge and competence based on qualifications and experience.</li> </ul>
		<ul> <li>Evaluate the process of reflection and self-evaluation and its role in learning.</li> </ul>
		<ul> <li>Articulate and evaluate a range of reflective tools and how to complete these as part of your professional development.</li> </ul>
		<ul> <li>Understand how to facilitate the professional development of others.</li> </ul>

Ref	Skills:	A Graduate Strength and Conditioning Coach must be able to:
S2.1	Participant centred service	Ensure participant safety and wellbeing at all times.
		<ul> <li>Provide a participant-centred coaching environment at all times, whereby the participants best interest is priority.</li> </ul>
		<ul> <li>Identify when the effectiveness and/or quality of service are compromised.</li> </ul>
		<ul> <li>Respect and value others and self-reflect to avoid discriminatory behaviour.</li> </ul>
		<ul> <li>Develop and maintain relationships with participants, other members of the multi-disciplinary support team and stakeholders (through communication and collaboration).</li> </ul>
		<ul> <li>Provide information and support which empowers participants to make informed choices.</li> </ul>
		<ul> <li>Compliance with relevant legal and organisational responsibilities: <ul> <li>Health and safety at work.</li> <li>Equality and diversity.</li> <li>Safeguarding.</li> <li>Data protection.</li> <li>Hazard identification.</li> <li>Safe working practices.</li> <li>Ethics and professional conduct.</li> </ul> </li> </ul>
		<ul> <li>Mitigate risk through implementing appropriate risk management processes.</li> </ul>
S2.2	Lawfulness, tact, and discretion regarding participant data	<ul> <li>Ensure participant data is handled in line with relevant lawfulness, tact, and discretion (i.e. General Data Protection Regulation - GDPR).</li> </ul>
S2.3	Professional development	<ul> <li>Identify personal values, preferences, and ways of working, and understand how these can affect the individual's behaviour, judgment and practice.</li> </ul>
		<ul> <li>Evaluate self through an appropriate model and discuss with other members of the multi-disciplinary team (where appropriate) to provide a comprehensive development plan which identifies areas for professional development.</li> </ul>
		<ul> <li>Demonstrate the ability to meaningfully reflect on coaching practice to inform professional development, as well as enhancing the performance enhancement process.</li> </ul>
		<ul> <li>Document the reflective process.</li> </ul>
		<ul> <li>Assess others needs and preferences and take appropriate action when and where needed.</li> </ul>
		<ul> <li>Design materials/experiences that facilitate personal development.</li> </ul>
		<ul> <li>Evaluate and reflect upon the effectiveness of learning and development, to ensure continued growth towards the performance enhancement process.</li> </ul>

# 3. Working within a multi-disciplinary team (as appropriate)

Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:
K3.1	Role and responsibilities as part of a multi-disciplinary team	<ul> <li>Understand the roles and responsibilities of the Graduate Strength and Conditioning Coach as both a stand-alone role and as part of a multi-disciplinary team.</li> <li>Awareness of organisational factors that can impact roles and</li> </ul>
		responsibilities of the Graduate Strength and Conditioning Coach as part of a multi-disciplinary team.
K3.2	Multi-disciplinary team roles	<ul> <li>Explain and evaluate the roles of other members of the multi- disciplinary team.</li> </ul>
		<ul> <li>Articulate an awareness of organisational factors (e.g. structure, due process) that can impact roles within a multi-disciplinary team.</li> </ul>
		<ul> <li>Recognise individual communication preferences and styles of communication of different individuals.</li> </ul>
		<ul> <li>Understand that relationships should be based on mutual respect and trust, regardless of personal compatibility.</li> </ul>
K3.3	Multi-disciplinary skills, as well as limits of own knowledge in line with policies and	<ul> <li>Appreciate and comprehend the knowledge and understanding and skills required by other members of the multi-disciplinary team.</li> </ul>
	procedures	<ul> <li>Recognise overlapping skill sets with other members of the multi- disciplinary team and the Graduate Strength and Conditioning Coach.</li> </ul>
		<ul> <li>Recognise organisational factors that can impact the skills utilised within a multi-disciplinary team.</li> </ul>
		<ul> <li>Understand multi-disciplinary knowledge limits but have the awareness and capacity to fill them so as to support the multi- disciplinary team (where applicable).</li> </ul>

### Ref Skills: A Graduate Strength and Conditioning Coach must be able to:

# S3.1 Professional boundaries of practice as both an individual and as part multidisciplinary team

- Ability to identify, negotiate, and determine professional boundaries when identifying the needs of the participant (including minors and vulnerable individuals) in relation to their performance-orientated goal as part of the performance enhancement process.
- Provide a strength and conditioning service which is in line with professional boundaries.
- Critically evaluate practice to inform the delivery of strength and conditioning services.
- When applicable, work collaboratively within the multi-disciplinary team to identify, agree and achieve shared performance-orientated goals.
- Demonstrate an understanding of, as well as appropriately manage, conflicts that occur when working as both an individual and as part of a multi-disciplinary team.
- Facilitate the sharing of information, advice and ideas within the multidisciplinary team (when applicable) using a multitude of communication pathways in line with GDPR regulations and organisational regulations.
- Modify communication to meet individual preferences and needs.

# S3.2 Scope of practice, referring out to other members of the multi-disciplinary team

- Openness to challenge own delivery within scope of practice, but a willingness and ability to defend core beliefs/philosophies
- Willingness and ability to challenge other members of the multidisciplinary teams' processes within their own scope of practice.
- Ability to identify when something is outside own scope of practice.
- Ability to identify an appropriate member of the multi-disciplinary team, or external practitioner, to refer a participant to.

# 4. Plan, prepare, deliver, continuously evaluate, review and adapt strength and conditioning programmes

COI	conditioning programmes		
Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:	
K4.1	Physiological function, anatomy and biomechanics, skill acquisition and pedagogy, psychology, and physical development across	Physiological function:  • Identify the energy systems and the predominant metabolic pathway for energy supply:  - Phosphagen system (ATP-PCr).  - Anaerobic glycolysis.  - Anaerobic (lactate).  - Aerobic system.	_

- to:Cardiovascular and respiratory systems.
  - Neuromuscular responses (e.g. motor unit recruitment).

Identity the immediate and long-term responses resultant from a variety of training stimuli (i.e. weightlifting, strength, plyometrics, speed, agility and metabolic conditioning) including, but not limited

- Muscle fibre composition and/or connective tissue structure.
- Skeletal responses (e.g. bone density and composition).
- Understand the possible effects of different training environments (e.g. extreme heat/cold, altitude, etc.).

### Anatomy and biomechanics:

- Understand and describe the planes of motion, anatomical movements, muscle role (i.e. agonists, antagonists and synergist) and muscle actions (i.e. eccentric, isometric, concentric) involved in specific joint movements.
- Understand and describe the isolated and integrated function of key muscles in the kinetic chain. For example, the gluteus maximus:
  - Extends the hip and,
  - Stabilises the pelvis/hips during dynamic movements.

### Psychology:

the lifespan

- Identity and evaluate key psychological approaches and their application to strength and conditioning, including, but not limited to:
  - Goal setting.
  - Motivation.
  - Self-confidence.
  - Resilience.
  - Psychological needs.

#### Skill acquisition and pedagogy:

- Identity and evaluate key pedagogical approaches/theories and their application to strength and conditioning, including, but not limited to:
  - Linear and non-linear pedagogy.
  - The individual process and rate of learning.
  - The different methods/styles of facilitating the learning process.
  - The role of feedback on the learning process.

#### Physical development from youth to adulthood:

- Explain the key pillars associated with well-rounded, holistic longterm athletic development (LTAD) programmes, informed from appropriate bodies of evidence:
  - Individualised, periodised programming.

### Knowledge and Ref A Graduate Strength and Conditioning Coach must: understanding K4.2 Multi-disciplinary Understand the process of conducting a thorough needs analysis needs analysis for participants, which may include information from the following areas: Biomechanics. Physiology. Psychology. Time-motion analysis. Injury risk. Understand how to differentiate between biomechanical, physiological, psychological, time-motion analysis, and injury risk demands for participants and how these inform the overall performance enhancement process. Understand how to identify, justify and conduct (including protocol knowledge, and the impact of controllable and uncontrollable factors) appropriate testing methods, regardless of age, sex, ability, and/or experience. Recognise the importance of validity and reliability, as well as the various ways to assess this. Understand the importance of setting baseline scores and how these scores (including comparisons to normative data if appropriate) inform the overall performance enhancement process. Understand how to effectively communicate and collaborate to create a multi-disciplinary needs analysis to inform and agree the performance-orientated goal as part the overall performance enhancement process. K4.3 Planning and Explain and justify the theories of performance planning, programming programming, and delivery including (but not limited to): - Individual differences. - Accommodation. General Adaptation Syndrome (GAS). - Progressive overload. - Use/disuse. - Specificity. Apply scientific principles to design strength and conditioning programmes to achieve short, medium, and long-term performance-orientated goals, regardless of age, sex, ability and/or experience. Outline and develop training plans, including knowledge of a range of appropriate periodisation methods, which identify and meet the agreed performance-orientated goal. Articulate the importance of modulating training variables to meet the demands of specific training phases and athlete training ages. An awareness of the logistical challenges associated with the

delivery of strength and conditioning programmes. An understanding of how common injuries and injury risk management principles influence planning, programming and

delivery of strength and conditioning services.

# Ref Knowledge and understanding

### A Graduate Strength and Conditioning Coach must:

### K4.4

Safely and effectively apply a wide range of applied coaching during strength and conditioning training sessions

- Understand and discuss the coaching process, the key principles
  of coaching and the importance of accruing experience with a
  wide range of participants to enhance own ability to coach
  effectively.
- Evaluate the knowledge storage and process, how we retrieve knowledge, and how decision-making applies to the coaching process.
- Defend approaches to effectively improving technique in line with accepted technical models through a range of methods in both an individual and group setting.
- Explain how to position and reposition yourself during training sessions to be able to effectively observe participants and respond to their needs.
- Understand the importance of the skill acquisition process by knowing how to adapt, regress, and progress exercises as appropriate in both an individual and group setting.
- Know how to modify and adapt exercises for a participant, or provide alternatives, regardless of the age, sex, ability, and experience in both an individual and group setting.
- Understand the importance of effective communication during the coaching process, and an understanding of a range of different communication and feedback methods.
- Adapt training sessions and pedagogical interventions to meet logistical and athlete specific challenges.
- An awareness of health and safety considerations, including, but not limited to, the environment, the individual, the group and the equipment.

#### K4.5

Know how to apply a wide range of monitoring techniques to inform the continuous evaluation and periodic review

- Justify the importance of effective evaluation and monitoring and its impact on strength and conditioning programme design (e.g. training load).
- Understand how to evaluate whether or not the strength and conditioning programme meets the performance-orientated goal, as well as when to actively engage participants and other members of the multi-disciplinary team with such data.
- Understand how to monitor a participant's readiness to train (e.g. using both quantitative and qualitative methods).
- Understand how to modify training schedules/sessions if the participant is deemed at risk e.g. reduction of training load or removal of certain exercises after discussion with technical coach or other members of the multi-disciplinary support team.
- An awareness of different learning preferences (e.g. audio, visual, etc.) available to optimise the individual learning environment.
- Understand how to interact with athletes and subjectively gauge readiness, mood and recovery.
- An awareness of a range of research methodologies e.g. using both quantitative and qualitative methods.

### Skills A Graduate Strength and Conditioning Coach must be able to: Ref **S4.1** Collecting, interpreting, Effectively communicate to the participant and other members of and utilising the multi-disciplinary team (as appropriate) how the needs performance testing analysis can be used to guide the selected testing methods. data Safely and effectively conduct and record a range of justified fitness testing methods, including, but not limited to: - Maximal strength (e.g. isokinetic dynamometry, isometric squat and mid-thigh pull, 1-3RM for lower and upper body). Jump testing (e.g. countermovement, squat, drop jumps and associated unilateral versions). Linear speed (e.g. acceleration and maximal velocity). Change of direction speed (e.g. pro-agility, Illinois, 505, etc.). Aerobic capacity (e.g. VO<sub>2</sub> max, Yo-Yo Intermittent Recovery, 30-15 test, Maximal Aerobic Speed). - Anaerobic capacity (e.g. Wingate). Assess, interpret and effectively communicate performance testing data to meaningfully inform the performance-orientated goal as part of the overall performance enhancement process. Critically appraise testing data to inform practice, addressing problems and issues arising in practice. Critically evaluate relevant literature regarding the conducting, interpreting and utilising of performance testing data. Demonstrate a level of skill in the use of information technology as appropriate to practice (inclusive of the safe storage of personal data where appropriate).

### Skills A Graduate Strength and Conditioning Coach must be able Ref to: **S4.2** Plan and effectively Demonstrate the ability to plan, prepare and deliver strength deliver a strength and and conditioning programmes, which are underpinned by conditioning scientific principles, over a period of time and are sufficient to programme achieve a range of participants' performance-orientated goals, regardless of sport, activity, age and/or experience. Effectively review and adapt training interventions to suit the participant within the session while still achieving desired training outcomes. Safely and effectively coach a warm-up that relates to the specific training session's objectives, as well as the overall objectives of the strength and conditioning programme. Safely and effectively coach a range of resistance training exercises in line with accepted technical models to address the needs in both an individual and group setting. For example, but not limited to: - Back squat. - Front squat. - Overhead squat. - Deadlift (+ associated variations; e.g. trap bar, sumo). - Romanian deadlift. - Nordic hamstring exercise. - Split squat. - Rear foot elevated split squat. - Lunge (+ associated variations; e.g. multi-planar - Step up (+ associated variations; e.g. barbell, DB). - Bench press (+ associated incline/decline and DB variations). Critically evaluate and implement research to underpin the effectiveness of the planning and effective delivery of strength and conditioning programmes.

Ref	Skills	A Graduate Strength and Conditioning Coach must:
S4.3	Continuously evaluate and periodically review the effectiveness of the strength and	<ul> <li>Effectively evaluate and reflect on strength and conditioning programmes delivered using outcome measures previously selected from the needs analysis and specific to the needs and requirements of the participant.</li> </ul>
	conditioning programme	<ul> <li>Conduct programme review meetings with participants and multi-disciplinary team members (if applicable) to review and adapt strength and conditioning programmes.</li> </ul>
		<ul> <li>Demonstrate an ability to provide alternative solutions to modification training sessions based on individual's readiness to train without compromising the performance-orientated goal.</li> </ul>
		<ul> <li>Critically appraise the evaluation and implementation of practice, addressing problems and issues arising in practice.</li> </ul>
		<ul> <li>Critically evaluate and implement research to underpin the evaluation and review of the strength and conditioning programme.</li> </ul>

# 5. Maximise the participant experience

Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:
K5.1	How to engage, communicate, obtain feedback, and support participants	<ul> <li>Engagement:         <ul> <li>Understand different methods to engage with participants</li> <li>Know different types of conflict and how to manage them.</li> <li>Know different methods to build rapport in order to maximise the participant experience.</li> <li>How to support safe and enjoyable use of the training environment.</li> </ul> </li> <li>The importance of being accessible and approachable to participants.</li> </ul>
		<ul> <li>Communication:         <ul> <li>Understand different communication techniques and how to use them.</li> <li>Observation/non-verbal techniques/body language, open/closed questioning, active listening.</li> <li>How to adapt communication methods to meet needs of participants from differing backgrounds, cultures, experience, etc.</li> </ul> </li> </ul>
		<ul> <li>Feedback:         <ul> <li>Understand different methods to obtain participant feedback and channels of recording and reporting in line with organisational procedures.</li> <li>Understand the feedback cycle and the impact of their role on the participant experience.</li> </ul> </li> </ul>
		<ul> <li>Support:         <ul> <li>How to support safe and enjoyable use of the training environment.</li> <li>The importance of being accessible and approachable to participants.</li> <li>Know different types of conflict and how to manage them.</li> <li>Know different methods to build rapport in order to maximise the participant experience.</li> </ul> </li> </ul>
K5.2	How to maximise the participant experience	<ul> <li>Understand the local demographics of their organisation's participants and how this affects the products and services offer.</li> </ul>
		<ul> <li>Participant expectations and aspirations within the training environment.</li> <li>Know how to build social support and inclusion within the</li> </ul>
		<ul><li>training environment.</li><li>Know how to obtain feedback to support exercise adherence.</li></ul>
K5.3	How the customer service elements combined will lead to the overall participant experience	<ul> <li>Understand the importance of excellent customer service.</li> <li>Understand their own, or their organisations' products and offering.</li> <li>Understand how to present themselves in a professional and approachable manner, in line with own professional values as</li> </ul>
		<ul> <li>well as organisational standards.</li> <li>Understand the importance of participant retention and how to influence participant retention.</li> </ul>

Ref	Skills:	A Graduate Strength and Conditioning Coach must be able to:
S5.1	Create positive and lasting first impressions	<ul> <li>Provide excellent customer service.</li> <li>Demonstrate a range of methods to create a positive and lasting first impression.</li> </ul>
S5.2	Develop relationships with participants	Communicate and reason effectively with participants through a multitude of communication styles to positively impact the overall performance enhancement process.
		<ul> <li>Provide a safe and enjoyable training environment.</li> </ul>
		<ul> <li>Demonstrate the ability to manage conflicts as and when they arise.</li> </ul>
		<ul> <li>Demonstrate the ability to build rapport with participants through a range of methods in order to maximise the overall performance enhancement process.</li> </ul>

# 6. Welfare of participants and providing a safe and inclusive strength and conditioning coaching environment

Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:
K6.1	Prepare safe activity areas and how to safely set up, dismantle, and store equipment	<ul> <li>Understand the importance of conducting risk assessments.</li> <li>Know how to undertake routine maintenance and cleaning tasks related to the training environment and equipment.</li> <li>Know how to safely set-up, use, dismantle and store equipment.</li> </ul>
Ref	Skills:	A Graduate Strength and Conditioning Coach must be able to:
S6.1	Organise own work tasks alongside colleagues to ensure a positive, safe, and inclusive learning environment	<ul> <li>Plan, prioritise and organise personal workload in agreement with other members of the multi-disciplinary team (if applicable) to ensure own wellbeing is maintained as a priority.</li> <li>Adaptability in delivery, location and equipment while remaining guided by the underpinning scientific theory and aligned to the performance outcome.</li> <li>Awareness of the possible risks in a range of environments, as wel as ways to mitigate them.</li> </ul>
S6.2	Welfare needs and positive management of behaviour	<ul> <li>Ensure dignity and welfare of participants, including rights and privacy.</li> <li>Employ a range of methods to positively manage participant behaviour in both an individual and a group setting.</li> </ul>
S6.3	Dynamic risk assessments	<ul> <li>Conduct dynamic risk assessments in practice to maximise the overall performance enhancement process.</li> </ul>

# 7. Industry legislation and guidance, organisational policies, and procedures

Ref	Knowledge and understanding	A Graduate Strength and Conditioning Coach must:
K7.1	Organisational policies and procedures	<ul> <li>Explain organisational policy and procedures including:         <ul> <li>Normal operating plans (NOP).</li> <li>Emergency action plans (EAP).</li> <li>Risk assessment.</li> <li>Admissions policy.</li> <li>Safeguarding policy.</li> <li>Equality and diversity policy.</li> </ul> </li> </ul>
		Insurance requirements.
K7.2	Legal and regulatory requirements	<ul> <li>Explain key legal and regulatory requirements including:</li> <li>Equality Act 2010.</li> <li>Children's Act 1989.</li> <li>Children's Act 2004.</li> <li>The Care Act 2014.</li> <li>Mental Capacity Act 2005.</li> <li>Data Protection Act 1998.</li> </ul>
		General Data Protection Regulations.
Ref	Skills:	A Graduate Strength and Conditioning Coach must be able to:
<b>S7.1</b>	Industry legislation and organisational policies and procedures in line with organisational guidelines and best professional practice	<ul> <li>Conduct strength and conditioning services within the requirements of the legal and policy frameworks governing strength and conditioning practice.</li> </ul>

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