

## UKSCA COMPETENCY DOCUMENT

### Use of this document:

On the following pages are tables that outline the outcomes that you must be able to demonstrate, in relation to the competencies expected of a UKSCA Accredited Strength and Conditioning Coach. The source of evidence details how the assessors will be expecting you to demonstrate these outcomes.

### Section A - Underpinning Scientific Knowledge

A1.0 The normal physiological functions of the human body during / in response to different training:		
	Outcome	Source of evidence
A1.1	Identify metabolic demands <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Identify predominant metabolic pathway for energy supply</li> <li>▪ Aerobic</li> <li>▪ Anaerobic – lactate</li> <li>▪ Anaerobic glycolytic</li> <li>▪ ATP-CP system</li> </ul>	Multiple choice exam
A1.2	Demonstrate knowledge of the cardio-vascular and respiratory system and its responses to different training stimuli <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Acute responses to exercise intensity:</li> <li>▪ Cardiac output, rate of breathing, blood flow redistribution in response to exercise</li> <li>▪ Long-term cardiovascular responses to different training programmes:</li> </ul>	Multiple choice exam
A1.3	Identify neuro-muscular responses to training stimuli <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Structure &amp; Role of the motor unit</li> <li>▪ Motor unit recruitment &amp; relationship with load intensity / effort</li> <li>▪ Neural adaptations to training</li> <li>▪ Muscle fibre structural responses to training programmes</li> <li>▪ Connective tissue responses to mechanical loading</li> </ul>	Multiple choice exam
A1.4	Identify skeletal structure responses to training stimuli <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Different types, structures and roles of bone</li> <li>▪ Adaptation of bone to mechanical loading</li> </ul>	Multiple choice exam
A1.5	Demonstrate knowledge of the influence of the environment upon training and performance response <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Influence of altitude, ambient heat / cold, humidity &amp; travel upon physiological response and skill response</li> </ul>	Multiple choice exam
A1.6	Apply the above knowledge in a context that is appropriate for both a sport/activity and the individual(s) concerned.	Case study

## Section A continued - Underpinning Scientific Knowledge

<b>A2.0 Applied functional human anatomy and movement</b>		
	<b>Outcome</b>	<b>Source of evidence</b>
A2.1	Undertake kinesiological analysis of joint involvement and action within specific movements <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Identify major joint structures (nature, type, planes &amp; ranges of motion) involved in identified activities</li> <li>▪ Nature of joint action (extension, flexion, abduction, adduction, rotation, joint-specific description, e.g. pronation / supination)</li> <li>▪ Demonstrate the relationship between sports actions and training movements</li> </ul>	Multiple choice exam
A2.2	Analysis of muscular involvement and actions within specific movements <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Identify prime movers and synergistic muscles involved in the movement</li> <li>▪ Identify recruitment patterns of muscles in a particular action</li> <li>▪ Identify muscular actions involved in the activity: Eccentric, concentric, isometric</li> </ul>	Multiple choice exam
A2.3	Demonstrate knowledge of proprioceptive and neural control mechanisms <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Identify knowledge of structure &amp; role of the neuro-muscular system in controlling human movement</li> </ul>	Multiple choice exam
A2.4	Apply the above knowledge in a context that is appropriate for both a sport/activity and the individual(s) concerned.	Case study
<b>A3.0 The principles of training and adaptation</b>		
	<b>Outcome</b>	<b>Source of evidence</b>
A3.1	Demonstrate the knowledge of planning variables <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Identify role of the overcompensation process in planning training sequences</li> <li>▪ Identify factors involved in the coaching process</li> </ul>	Multiple choice exam
A3.2	Knowledge of valid & reliable testing & monitoring procedures <u><b>Indicative knowledge:</b></u> <ul style="list-style-type: none"> <li>▪ Use of monitoring athletes training responses through training records or sports-specific fitness tests</li> </ul>	Multiple choice exam
A3.3	Apply the above knowledge in a context that is appropriate for both a sport/activity and the individual(s) concerned.	Case study

## Section B - Strength and conditioning skills working with performance-oriented athlete(s)

The strength and conditioning coach should possess and demonstrate the following skills and abilities that are transferable and not limited to, the performance-oriented environment.

	<b>Outcome</b>	<b>Source(s) of evidence</b>
B1.1	Implement a sport/activity specific periodised programme	Case study
B2.1	Demonstrate the coaching and/or technical knowledge of the following techniques (applied in a sport specific manner): 1) Weight lifting <ul style="list-style-type: none"> <li>▪ Full Back Squat (high bar position)</li> <li>▪ Clean and jerk OR Snatch</li> </ul> 2) Plyometric technique 3) Speed and agility	Practical assessment
B2.2	Demonstrate the coaching and/or technical knowledge of the following techniques (applied in a sport specific manner): 1) Weight lifting <ul style="list-style-type: none"> <li>▪ Bench Press</li> <li>▪ Bent-over row</li> </ul>	Multiple choice exam and/or pre-learning
B2.3	Demonstrate the coaching and/or technical knowledge of the following techniques (applied in a sport specific manner): 1) Aerobic and anaerobic endurance 2) Flexibility	Case study presentation and multiple choice exam
B3.1	Demonstrate the implementation of monitoring procedures to evaluate progress	Case study

## Section C - Professional and general competencies in strength and conditioning

The strength and conditioning coach should have the ability to demonstrate an applied knowledge of ethical practice in strength and conditioning.

<b>C1.0 Design and plan sessions/programme</b>		
	<b>Outcome</b>	<b>Source(s) of evidence</b>
C1.1	Undertake appropriate needs analysis to determine athlete needs for training programme design	Case study
C1.2	Identify appropriate tasks and activities that progressively link to enable performance improvement	Case study
C1.3	Design training sessions for athletic performance enhancement in different populations	Case study
C1.4	Plan realistic timings, sequences, intensity and duration of the activities in conjunction with the athlete's competitive schedule and / or technical / tactical programme	Case study
C1.5	Evaluate the effectiveness of the training programme	Case study
<b>C2.0 Delivery of coaching sessions</b>		
	<b>Outcome</b>	<b>Source(s) of evidence</b>
C2.1	Deliver warm-up activities appropriate to the session and the athlete(s)	Practical assessment
C2.2	Demonstrate delivery of safe, effective and appropriate training methods	Practical assessment
<b>C3.0 Communicate effectively with others</b>		
	<b>Outcome</b>	<b>Source(s) of evidence</b>
C3.1	Demonstrate effective communication with athletes	Practical assessment
C3.2	Demonstrate effective communication with other members of the athlete support team	Letters of support
C3.3	Demonstrate confidentiality of data elicited in relation to athlete(s) and their athletic performance (in accordance with current data protection legislation).	Multiple choice exam
<b>C4.0 Apply the principles of health and safety to your environment</b>		
	<b>Outcome</b>	<b>Source(s) of evidence</b>
C4.1	Demonstrate knowledge of risk assessment and the identification of emergency procedures	Health & safety information Submission of copy of NOP/EAP (one venue only)
C4.2	Demonstrate knowledge of first aid and associated procedures	Recognised first aid certification (min. 4 hour course)