

# iUSP175 – Planning a strength and conditioning session

URN – K/617/5680

**Guided Learning Hours: 10**

Learning outcome	Assessment criteria	Taught content to include
LO1 Know the origins of strength and conditioning training	1.1. Describe the origins of strength and conditioning training	<ul style="list-style-type: none"> <li>• Greece</li> <li>• Milo of Croton</li> <li>• Charles Atlas</li> <li>• History</li> <li>• Various branding</li> <li>• Style and examples of equipment</li> <li>• Strong man competitions</li> <li>• Powerlifting</li> <li>• Bodybuilding</li> <li>• Olympic lifts</li> <li>• Macro, meso and micro parts of periodisation</li> <li>• Components of fitness</li> <li>• Various fitness tests</li> </ul>
LO2 Understand the benefits of strength and conditioning training	2.1. Describe the benefits of strength and conditioning training	<ul style="list-style-type: none"> <li>• Agility</li> <li>• Power</li> <li>• Strength</li> <li>• Co-ordination</li> <li>• Rehabilitation</li> <li>• Functionality to sports</li> <li>• Body image</li> <li>• Muscular balance</li> <li>• Entire body workout</li> <li>• Use of multiple joints and muscles safe, effective, all ages</li> </ul>

	2.2. Describe the physiological adaptations of strength and conditioning training	<ul style="list-style-type: none"> <li>• Body structures</li> <li>• Body plane of movements</li> <li>• Strength and conditioning exercises</li> <li>• Breathing techniques</li> <li>• Linking theory to practical application</li> <li>• Body alignment</li> </ul>
	2.3. List the types of equipment	<ul style="list-style-type: none"> <li>• Traditional resistance training with barbells</li> <li>• Dumbbells</li> <li>• Smith machine</li> <li>• Functional equipment</li> <li>• Variety of exercises <ul style="list-style-type: none"> <li>- The jerk</li> <li>- The clean</li> <li>- The snatch</li> <li>- The clean and jerk</li> <li>- Olympic weightlifting</li> </ul> </li> </ul>
	2.4. Evaluate the benefits of strength and conditioning training when compared to other exercise methods	<ul style="list-style-type: none"> <li>• 1 RM Tests</li> <li>• 3 RM Tests</li> <li>• 10 RM Tests</li> <li>• Functional strength tests</li> <li>• LME tests</li> <li>• Progressive overload principle</li> <li>• Reversibility</li> <li>• Peripheral heart rate training</li> <li>• Fitness testing (clinical/on field)</li> <li>• Sports specific fitness</li> <li>• VO2 max</li> <li>• Max HR</li> <li>• THR</li> <li>• Karvonen formula</li> </ul>

LO3 Understand health and safety considerations	3.1. Identify health and safety considerations when instructing strength and conditioning training	<ul style="list-style-type: none"> <li>• Health and safety</li> <li>• Code of conduct</li> <li>• Code of ethics</li> <li>• Environment</li> <li>• Working relationships</li> <li>• Organisation standards and procedures</li> </ul>
---	--	---

		<ul style="list-style-type: none"> <li>• Verbal screening</li> <li>• Contra-indications</li> <li>• Footwear and clothing</li> </ul>
	<p>3.2. Identify possible contra-indications to strength and conditioning training</p>	<ul style="list-style-type: none"> <li>• Any joint conditions</li> <li>• Vertigo</li> <li>• Total or restricted medical contra-indications</li> <li>• Fitness levels</li> <li>• Osteoporosis</li> <li>• High/low blood pressure</li> <li>• Heart conditions</li> <li>• Any acute fevers including influenza</li> <li>• Glandular fever</li> <li>• Common cold etc.</li> <li>• Any inflammatory joint conditions including arthritis, rheumatoid arthritis, osteoarthritis</li> <li>• Any neurological disorders including strokes, multiple sclerosis unless medically supervised</li> <li>• Any undiagnosed illness</li> <li>• Any musculoskeletal problems including joint or back pain, any pain and soreness in muscles caused by trauma or injury</li> <li>• Pregnancy – medical permission must be sought before continuing</li> <li>• After a heavy meal or under the influence of alcohol</li> <li>• Any recreational or painkilling drug</li> <li>• If over tired or exhausted</li> <li>• If there has been any difficulty with exercise in the past</li> </ul>
	<p>3.3. Outline the potential risks associated with strength and conditioning training</p>	<ul style="list-style-type: none"> <li>• Safety and the equipment</li> <li>• Safety and the user</li> <li>• Special populations and adaptations/modifications</li> <li>• Training times</li> </ul>
	<p>3.4. Identify the correct body position relative to equipment</p>	<ul style="list-style-type: none"> <li>• Head in line with spine</li> <li>• Palms facing up or down</li> <li>• Breathing on effort</li> <li>• Valsalva manoeuvre</li> <li>• Breath holding</li> <li>• Knees soft</li> <li>• Elbows soft</li> </ul>

		<ul style="list-style-type: none"> <li>• Core importance</li> </ul>
LO4 Be able to plan a strength and conditioning training session	4.1. Select suitable exercises, equipment and programme variables to meet specific objectives	<ul style="list-style-type: none"> <li>• Traditional resistance training with barbells</li> <li>• Dumbbells</li> <li>• Smith machine</li> <li>• Functional equipment</li> <li>• Variety of exercises <ul style="list-style-type: none"> <li>- The jerk</li> <li>- The clean</li> <li>- The snatch</li> <li>- The clean and jerk</li> <li>- Olympic weightlifting</li> </ul> </li> </ul>
	4.2. Adapt the programme to meet the client's needs and fitness goal	<ul style="list-style-type: none"> <li>• Pyramid rep/set system</li> <li>• Principles of training</li> <li>• Skill and health related components of fitness</li> <li>• Floor space (indoor/outdoor)</li> <li>• Floor type</li> <li>• Type of equipment, weight and sizes</li> <li>• Other users</li> <li>• Footwear</li> <li>• Biomechanics</li> <li>• Joint mobility</li> <li>• Adaptations</li> <li>• Progressions</li> <li>• Rest</li> <li>• Participant's ability/current level of fitness/experience</li> </ul>
	4.3. Record the strength and conditioning training plan	<ul style="list-style-type: none"> <li>• Exercises and equipment</li> <li>• Any adaptations according to client's needs and fitness goal</li> </ul>

Assessment	
Portfolio of evidence	Containing 3 practical performances

**Guide to taught content**

The content contained within the unit specification is not prescriptive or exhaustive but is intended to provide helpful guidance to teachers and learners with the key areas that will be covered within the unit, and, relating to the kinds of evidence that should be provided for each assessment objective specific to the unit learning outcomes.

**Document History**

Version	Issue Date	Changes	Role
v1	13/08/2019	First published	Qualifications and Regulation Co-ordinator