

MODULE DESCRIPTOR

Module Title	Strength and Conditioning Theory
Course Title	BSc (Hons) Sport Coaching and Analysis 4162
School	<input checked="" type="checkbox"/> ASC <input type="checkbox"/> ACI <input type="checkbox"/> BEA <input type="checkbox"/> BUS <input type="checkbox"/> ENG <input type="checkbox"/> HSC <input type="checkbox"/> LSS
Division	Human Sciences
Parent Course (if applicable)	
Level	5
Module Code (showing level)	ASC_5_426
JACS Code (completed by the QA)	
Credit Value	20 credit points
Student Study Hours	Total Learning Hours: 200 Contact hours: 51 Lecture / tutorial 36 Practical 15 Student managed learning hours: 149
Pre-requisite Learning	None
Co-requisites	None
Excluded combinations	None
Module co-ordinator	Name: Steve Hunter Email: steve.hunter@lsbu.ac.uk
Short Description (max. 100 words)	This module will develop the student's knowledge and understanding of training theory and training programme design. It will focus on the responses and adaptations of a range of physiological systems to exercise training. It will develop a thorough understanding of the theory and principles used in the design of conditioning programmes to develop physiological (anaerobic and aerobic endurance; speed, agility and quickness, metabolic function and muscular strength and power) and allow the student to put theory into practice.
Aims	The aims of this module are: <ol style="list-style-type: none"> 1. To develop knowledge of the acute and chronic responses of the physiological systems that support exercise. 2. To develop a scientific understanding of training theory and strength and conditioning practices for the improvement of exercise performance.
Learning Outcomes (4 to 6 outcomes)	By the end of this module, students will be able to: <ol style="list-style-type: none"> 1. Evaluate training responses and adaptations: Strength, flexibility, power, aerobic and anaerobic performance. 2. Examine contemporary approaches used in training theory for enhancement of physiological performance.

	<p>3. Explain the scientific principles of training, periodization and exercise planning.</p> <p>4. Explain and demonstrate training programmes designed to increase the physiological components of performance</p>
Employability	<p>This module contains specification content required by the register of exercise professionals (REPS) L2 and L3 Gym Instructor course in the areas of exercise and fitness knowledge, cardiovascular and respiratory systems, muscular and neuromuscular systems, training principles and practices. It also contains knowledge and skills covered in the UKSCA workshops:</p> <p>1. Foundation workshop in strength and conditioning. 2. Plyometrics, agility and speed.</p>
Teaching and learning pattern	<p>Contact hours includes the following: (please click on the checkboxes as appropriate)</p> <p><input checked="" type="checkbox"/> Lectures <input checked="" type="checkbox"/> Group Work: <input type="checkbox"/> Seminars <input type="checkbox"/> Tutorial: <input checked="" type="checkbox"/> Laboratory <input type="checkbox"/> Workshops <input checked="" type="checkbox"/> Practical <input type="checkbox"/> VLE Activities</p>
Indicative content	<ul style="list-style-type: none"> • Human skeletal muscle, the neuromuscular system and strength in sport. Training muscle strength principles and practices • Training flexibility principles and practices • System support and adaptation to high intensity (anaerobic) exercise: Training for anaerobic performance. • System support and adaptation to endurance exercise: Cardiorespiratory physiology: Training for endurance. • Structuring exercise strength and conditioning programmes Endocrinology and exercise.
Assessment method (Please give details – of components, weightings, sequence of components, final component)	<p>Formative assessment – Mind map of training plan.</p> <p>Summative assessment (100% CW) - Design and presentation of a training session to include example training session with evidence based commentary explaining the scientific basis of selected training practices.</p>
Mode of resit assessment (if applicable)	<p>Formative assessment: As Above.</p> <p>Summative assessment: As above.</p>
Indicative Sources (Reading lists)	<ol style="list-style-type: none"> 1. ACSM (2016) <i>ACSM's Essentials of Strength Training and Conditioning</i> Philadelphia. Lippincot, Williams and Wilkins 2. Bompa. T., and Carrera. M., (2005) <i>Periodization Training for Sports</i> 2nd Ed. Champaign Ill, Human Kinetics 3. Chandler T.J. (2011) <i>Conditioning for Strength and Human Performance</i> 2nd Ed. Philadelphia. Lippincot, Williams and Wilkins 4. Hoffman. J., (2002) <i>Physiological aspects of sport, training and performance</i>. Human Kinetics. Champaign Ill. 5. McArdle W D, Katch F, Katch V. (2014) <i>Exercise Physiology: Energy, nutrition and human performance</i> 8th Ed. Philadelphia. Lippincot, Williams and Wilkins 6. NASM (2009) <i>NASM's Essentials of Sports Performance Training</i> Philadelphia. Lippincot, Williams and Wilkins
Other Learning Resources	VLE