

Liverpool John Moores University

Title: Applied Strength and Conditioning
Status: Definitive
Code: **6503SPRT** (128442)
Version Start Date: 01-08-2021

Owning School/Faculty: Sport and Exercise Sciences
Teaching School/Faculty: Nelson and Colne College Group

Team	Leader
Ian Sadler	

Academic Level: FHEQ6
Credit Value: 20
Total Delivered Hours: 36
Total Learning Hours: 200
Private Study: 164

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	15
Seminar	6
Tutorial	15

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	Report	Response to Exercise Report (2000 words)	40	
Presentation	Pres	Analysis of Programme Presentation (15-min)	60	

Aims

Students will develop the knowledge and practical skills required for the effective design and implementation of athlete condition programmes. This will build on the skills developed at level 5 in the Physiology of Strength and Conditioning Exercise module and will provide an opportunity for practical application of the training methods introduced.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically analyse the response of the physiological systems during exercise.
- 2 Critically evaluate advanced theories of training and conditioning and apply them to sport specific training solutions.
- 3 Apply fundamental training theory to the evaluation of contemporary training methods.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Written Report	1	
Oral Presentation	2	3

Outline Syllabus

Review of essential physiology:

- Cardiovascular system and exercise
- Neuromuscular system and exercise
- Metabolism and energy transfer during exercise

Review of important biomechanical principles:

- Levers
- Centre of gravity
- Base of support
- Ranges and planes of movement

Advanced training and conditioning theory:

- Training for strength and power
- Speed development and sprint training
- Endurance training
- Plyometric exercise
- Periodisation

Practical techniques:

- Olympic weightlifting
- Plyometric drills
- Speed and sprint training
- Agility and balance

Programme design and facility management:

- *Safety considerations*
- *Equipment*
- *Emergency procedures*

Testing and evaluation of the athlete:

- *Experimental design*
- *Data collection*
- *Data analysis*
- *Compiling an evaluative report*

Learning Activities

The students will be engaged in a blend of teaching and learning strategies. Theoretical delivery will occur through lectures, teamwork, workshops, practical and student lead discovery-based learning, supported via the VLE. The students will typically receive 15 of hours of theory through lectures and 6 hours of seminars to conceptualise the current agendas and policies. Furthermore, students will receive 15 hours of group tutorials where staff will assist students to integrate their knowledge in preparation for upcoming assessments. Guest lectures may also be included from sport industry practitioners.

Notes

None.