

### Summary Information

<b>Module Code</b>	6503SPRT
<b>Formal Module Title</b>	Applied Strength and Conditioning
<b>Owning School</b>	Sport and Exercise Sciences
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 6
<b>Grading Schema</b>	40

### Module Contacts

#### Module Leader

Contact Name	Applies to all offerings	Offerings
Colin Lewis	Yes	N/A

#### Module Team Member

Contact Name	Applies to all offerings	Offerings
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#### Partner Module Team

Contact Name	Applies to all offerings	Offerings
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### Teaching Responsibility

<b>LJMU Schools involved in Delivery</b>
LJMU Partner Taught

## Partner Teaching Institution

Institution Name
Nelson and Colne College Group

## Learning Methods

Learning Method Type	Hours
Lecture	15
Seminar	6
Tutorial	15

## Module Offering(s)

Offering Code	Location	Start Month	Duration
SEP-PAR	PAR	September	12 Weeks

## Aims and Outcomes

<b>Aims</b>	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.
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## Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Critically analyse the response of the physiological systems during exercise.
MLO2	Critically evaluate advanced theories of training and conditioning and apply them to sport specific training solutions.
MLO3	Apply fundamental training theory to the evaluation of contemporary training methods.

## Module Content

### 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

### Module Overview

#### Additional Information

None.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Written Report	40	0	MLO1
Presentation	Oral Presentation	60	0	MLO2, MLO3