

**Summary Information**

<b>Module Code</b>	4505SPRT
<b>Formal Module Title</b>	Anatomy and Exercise Physiology
<b>Owning School</b>	Sport and Exercise Sciences
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 4
<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	18
Workshop	15

## Module Offering(s)

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

## Aims and Outcomes

<b>Aims</b>	The module aims to introduce students to fundamental anatomy and physiology concepts with a specific application to sport and exercise. The students will develop an understanding of the structure of the sports body and the functioning of the main body systems (skeletal, energy, cardiovascular, respiratory, muscular, nervous, endocrine). The students will have the opportunity to apply theory into practice through specially designed practical sessions in the laboratory.
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## Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Demonstrate an understanding of fundamental anatomy and physiology concepts.
MLO2	Identify the structure and functions of the major physiological systems.
MLO3	Utilise laboratory procedures to measure function of physiological systems.

## Module Content

### Outline Syllabus

Necessary Life Functions:• Homeostasis Cells (Structure and Function):• Cell Growth- Mitosis Skeletal System:• Bone Structure and Development• Functions of the Skeletal System• Bone Remodelling and RepairMuscular System:• Muscle tissues- Types• Muscle structure- Agonist and antagonistic pairs• Muscular System Functions Cardiovascular System:• Heart• Blood• Blood Vessels • Blood PressureRespiratory System:• Structure• Mechanics of breathing• Gas Exchange Energy Systems:• Aerobic Energy System• Lactic Acid Energy System• ATP-PC Energy System• Energy Continuum Endocrine System:• Hormones and GlandsNervous System:• Sympathetic and parasympathetic nervous systems Effects of exercise:• Acute and Chronic responses to exercise on each body system

### Module Overview

#### Additional Information

None.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Exam	Written Exam	70	0	MLO2, MLO1
Practice	Practical Skills	30	0	MLO3