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Refer to guidance notes for completion of each section of the specification.

Module Code:	SIR402
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Module Title:	Introduction to Anatomy and Physiology
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Level:	4	Credit Value:	20
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Cost Centre(s):	GASP	HECoS code:	100433
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Faculty:	Social & Life Sciences	Module Leader:	Dan Morris
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Scheduled learning and teaching hours	36 hrs
Supervised learning eg practical classes, workshops	21 hrs
Total contact hours	57 hrs
Guided independent study	143 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered (not including exit awards)	Core	Option
BSc (Hons) Football Coaching and the Performance Specialist (SPT414)	✓	<input type="checkbox"/>
Applied Sport and Exercise Sciences (SPT414)	✓	<input type="checkbox"/>
BSc (Hons) Sports Injury Rehabilitation (SIR402)	✓	<input type="checkbox"/>

Pre-requisites
None

Office use only	
Initial approval: 30/04/2019	Version no: 2
With effect from: 23/09/2019	
Date and details of revision: 13/07/2020 - AM2 amendment to contact hours, essential reading list, module leader and additional LO.	Version no:

Module Aims

This module will:

- introduce the student to applied anatomy & physiology and enhance their knowledge and understanding of the complex systems within the human body.
- develop an understanding of models that explore the critical windows of opportunity to influence sport and health.
- investigate how the body responds to sport and physical activity and explores the methods used to monitor the development of the bodily systems within a sporting context.

Module Learning Outcomes - at the end of this module, students will be able to

1	Demonstrate an understanding of how the various systems of the body work at rest and in relation to exercise.
2	Demonstrate the ability to collect, collate and statistically analyse physiological data.
3	Identify and demonstrate how to conduct specific physiological tests.
4	Explain experimental data collected from laboratory based practical work
5	Demonstrate an understanding of human anatomy terminology

Employability Skills The Wrexham Glyndŵr Graduate	I = included in module content A = included in module assessment N/A = not applicable
CORE ATTRIBUTES	
Engaged	I
Creative	I
Enterprising	I
Ethical	A
KEY ATTITUDES	
Commitment	I
Curiosity	A
Resilient	A
Confidence	A
Adaptability	A

Employability Skills The Wrexham Glyndŵr Graduate	I = included in module content A = included in module assessment N/A = not applicable
PRACTICAL SKILLSETS	
Digital fluency	I
Organisation	I
Leadership and team working	I
Critical thinking	I
Emotional intelligence	I
Communication	A
Derogations	
SIR402 Sports Injury Rehabilitation students must pass both elements of assessment at 40% or above	

Assessment:			
Indicative Assessment Tasks:			
<p>Assessment 1: MCQ Students will undertake a multiple choice examination under exam conditions in a formal setting, assessing their knowledge of the anatomical structures within the body and how the body functions and rest and in response to exercise. (Duration: 2 hours)</p> <p>Assessment 2: Laboratory Report Students will use the physiological data they have collected during their practical seminar to write a laboratory report</p>			
Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1 & 2, 5	Multiple Choice Questions	50
2	3 & 4	Report	50

Learning and Teaching Strategies:
The learning and teaching strategies will include lectures, seminars, practical's, peer-led discussions, tutorials, online based quizzes/tasks.

Syllabus outline:
<p>Homeostasis- health screening and blood pressure Muscular skeletal system- body composition Cardiovascular system- HR and RPE, RMR and VO2max</p>

Syllabus outline:

Energy systems- Wingate testing
Respiratory system- spirometry
Nervous system
Endocrine system
Immune system
Statistics

Indicative Bibliography:**Essential reading**

McArdle, W. D. Katch, F. I. and Katch, V. L. (2015), *Exercise Physiology: Energy, Nutrition & Human Performance*. 8th ed. Philadelphia: Williams and Wilkins.

Martini, F.N. Nath, J.L. Bartholowmew, E.F. (2018), *Fundamentals of Anatomy and Physiology*. 11th ed. Upper Saddle River, NJ: Pearson. Martini, F. H. (2015), *Fundamentals of Anatomy and Physiology*. 10th ed. New Jersey: Prentice Hall.

Palastanga, N. and Soames , R. (2018) *Anatomy and Human Movement: Structure and Function*. 7th ed. Amsterdam: Elsevier

Other indicative reading

Norris, M. and Siegfried, D.R. (2017), *Anatomy and Physiology for Dummies*. 3rd ed. Hoboken, NJ: Wiley.

Power, S.K. and Howley, E.T. (2017), *Exercise Physiology. Theory and Application to Fitness and Performance*. 10th ed. New York: McGraw-Hill.

Tortora, G.J. and Derrickson, B. (2017), *Principles of Anatomy and Physiology*. 15th ed. Singapore: Wiley