

<b>Module Title:</b>	Applied Anatomy and Sport Physiology
<b>Language of Instruction:</b>	English
<b>Credits:</b>	5
<b>NFQ Level:</b>	6
<b>Module Delivered In</b>	<a href="#">6 programme(s)</a>
<b>Teaching &amp; Learning Strategies:</b>	The learning outcomes detailed above will be achieved through the following teaching methodologies: • Lectures – The lecturer will use a combination of lecture, Questions & Answers, group discussion, PowerPoint presentation and online quizzes where appropriate. • Practicals – Students will work in pairs and small groups on (i) applied anatomy and resistance training tasks, including joint actions and stretching and strengthening exercises for principal muscles • Problem Solving Exercises – Students will work individually and as part of a team to resolve various tasks associated with applied anatomy and sports physiology in both theory and practical classes. • Class Discussion/Debate - Students will be encouraged to actively participate in the class sessions which will develop their analytical and communication skills. • E-Learning – The module will be supported with on-line learning materials through Blackboard. • Self-Directed Independent Learning – The emphasis on independent learning will develop a strong and autonomous work and learning practices.
<b>Module Aim:</b>	The aim of this module is to develop students' scientific knowledge and understanding of bodily systems responses to exercise and sports performance. Students will be introduced to a broad range of topics in the area of applied anatomy and sports physiology, giving them a framework within which to understand how sportspeople respond and adapt to different types of training. Students will gain an understanding of how to prescribe appropriate and effective training programmes to enable the sportsperson to achieve optimum performance.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Apply the fundamental principles of anatomy and physiology (bones, joints, spinal column and muscles) to basic functional movement and exercise prescription
LO2	Explain the principles of training and their application to the components of fitness in designing effective training programmes
LO3	Demonstrate an understanding of aerobic and anaerobic energy metabolism in the human body and how these systems can be trained to achieve optimal physical performance.
<b>Pre-requisite learning</b>	
<b>Module Recommendations</b> <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
<b>Incompatible Modules</b> <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b> <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

## Module Content & Assessment

### Indicative Content

#### Basic & Applied Anatomy

• Structural and functional characteristics of bone and muscle • Functional anatomy and movement analysis (origin and insertion of muscles, joint actions, stretching and strengthening exercises for principal muscles)

#### Components of Fitness & Principles of Training

• Health and performance-related components of fitness defined • Application of principles of training to components of fitness • Basic principles of programme planning & periodisation

#### Basic Energy Systems

• Aerobic and anaerobic energy metabolism • Training the energy systems • Design of appropriate training programmes

#### Muscle Contraction

• Basic physiology of muscle contraction • Characteristics of muscle fibre types • Factors affecting generation of force

### Assessment Breakdown

	%
Practical	30.00%
End of Module Formal Examination	70.00%

No Continuous Assessment

No Project

### Practical

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	1. Compound lifting assessment in gym/anatomy exam. Students will be asked to perform and teach specific compound exercises	1	30.00	Sem 1 End

### End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	Written Examination	1,2,3	70.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

### Module Workload

Workload: Full Time		
Workload Type	Frequency	Average Weekly Learner Workload
Lecture	Every Week	2.00
Practicals	Every Week	1.00
Independent Learning	Every Week	6.00
Total Hours		9.00

**Module Delivered In**

Programme Code	Programme	Semester	Delivery
CW_BBSMC_B	<a href="#">Bachelor of Arts (Honours) in Sport Management and Coaching</a>	1	Mandatory
CW_BBSOC_D	<a href="#">Bachelor of Arts in Sport Coaching and Business Management (Football)</a>	1	Mandatory
CW_BBGAA_D	<a href="#">Bachelor of Arts in Sport Coaching and Business Management (GAA)</a>	1	Mandatory
CW_BBRUG_D	<a href="#">Bachelor of Arts in Sport Coaching and Business Management (Rugby)</a>	1	Mandatory
CW_BBSBC_D	<a href="#">Bachelor of Arts in Sport, Business and Coaching</a>	1	Mandatory
CW_BBSBC_B	<a href="#">Bachelor or Arts (Honours) in Sport, Business and Coaching</a>	1	Mandatory