

Module Title:	Strength and Conditioning
Language of Instruction:	English
Credits:	5
NFQ Level:	6
Module Delivered In	4 programme(s)
Teaching & Learning Strategies:	This module will be taught in one theory class of one hour duration and a double hour practical per week. The theory class will include lecture, Q&A, group discussion, case studies, PowerPoint presentations, self directed learning and e-learning where appropriate. The practical work will comprise demonstration and instruction in training methods to develop the various performance-related components of fitness. The primary focus however will be on developing students' practical coaching skills and confidence in conducting training drills
Module Aim:	The aim of this module is to provide students with the scientific knowledge to formulate and critically analyse effective training programmes in accordance with the long term pathway to enable the athlete of all levels to achieve optimum performance.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Apply and analyse training drills to develop the performance-related components of fitness and demonstrate an understanding of the scientific principles underpinning such training
LO2	Develop the appropriate coaching and instructional use of resistance training to develop muscular strength, power and muscular endurance
LO3	Understand and apply the principles of periodisation in the design of training programmes in the different phases of a season that reflects the specific demands of different sports.
LO4	Understand and apply advanced strength and conditioning concepts e.g. Complex training, PAP
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements <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
<p>Resistance Training: (i) biomechanical principles of resistance training – joint loading, system loading, forces, centre of gravity; analysis of resistance exercises to develop appropriate load technique and load for muscular development and rehabilitation. (ii) resistance training for specific sports; (iii) Olympic lifts – teaching technique and progression</p>
<p>Plyometrics : scientific principles of plyometric training (stretch shortening cycle), basic plyometric exercises, medicine ball drills, sport-specific plyometric drills, safety considerations, designing plyometric programmes; complex and functional training</p>
<p>Speed/Agility/Quickness (SAQ): science and application of SAQ training, sprint training, acceleration/deceleration, reaction/quickness training, application of SAQ principles to different sports</p>
<p>Endurance training : review and conduct training methods for aerobic and anaerobic endurance training and lactate threshold training (steady-state, fartlek, interval, maximum aerobic speed training, hill repetitions, sport specific drills)</p>
<p>Periodisation: design of preparatory, competitive and transition training programmes, practical application of programme design for specific sports, application of macro, meso and micro cycles, preparation for competition, peaking and tapering</p>

Assessment Breakdown	%
Practical	60.00%
End of Module Formal Examination	40.00%

No Continuous Assessment

No Project

Practical				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	A practical exam will assess the students practical application of Strength and Conditioning concepts	1,2,3,4	60.00	Sem 1 End

End of Module Formal Examination				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	A three hour terminal exam will be held at the end of the year	1,2,3,4	40.00	End-of-Semester

ITCarlow reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	30 Weeks per Stage	0.50
Practicals	30 Weeks per Stage	1.00
Estimated Learner Hours	15 Weeks per Stage	7.33
	Total Hours	155.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_BBGAA_D	BA in Sport Coaching & Business Management (GAA)	2	Mandatory
CW_BBRUG_D	BA in Sport Coaching & Business Management (Rugby)	2	Mandatory
CW_BBSOC_D	BA in Sport Coaching & Business Management (Soccer)	2	Mandatory
CW_BBSMC_B	Bachelor of Arts (Honours) in Sport Management and Coaching	2	Mandatory