DATA: Introduction to Data Analysis for Sport

Module Title:	Introduction to Data Analysis for Sport
Language of Instruction:	English

Credits:	5

NFQ Level:	8

Module Delivered In	8 programme(s)

Teaching & Learning Strategies:	This module will be taught through practical classes in computer labs. Students will be expected to complete problem sheets to enforce learning. Relevant notes, examples and resources will be available on Blackboard.

Module Aim:	The aim of this module is to develop students' mathematical and statistical skills with a view to using these skills to analyse sports data. Students will be introduced to the areas of data visualisation, descriptive statistics and inferential statistics. The students will also be introduced to the use of statistical software for data analysis.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Describe basic concepts in statistics, data visualisation and data analysis.
LO2	Evaluate and apply key descriptive analysis techniques when carrying out analysis of sports data.
LO3	Evaluate and apply key inferential statistical techniques when carrying out analysis of sports data.
LO4	Solve well-formed problems by selecting the appropriate techniques and presenting the answer in a sporting context.

Pre-requisite learning
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*
No recommendations listed
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*
No incompatible modules listed
Co-requisite Modules
No Co-requisite modules listed
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*
No requirements listed

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Module Content & Assessment

Indicative Content
Introduction to Statistics Different data types, tabulation of data, and sampling. Measures of central tendency and dispersion including mean, median and standard deviation.
Data Visualisation Description of different data visualisation techniques, their purpose and when they are suitable to use. Best practices in data visualisation.
Inferential Statistics Application of correlation, linear regression and hypothesis testing to analysing sports data.
Computer Practicals Application of theoretical material using relevant software.

Assessment Breakdown	%
Continuous Assessment	100.00%

Continuous Assessment				
Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Other	Learners will be required to demonstrate achievement of the learning outcomes through continuous assessment. This work may take the form of a project (individual/group), practical exam, presentation, case analysis, poster presentation but is not limited to these formats.	1,2,3,4	100.00	n/a

No Project

No Practical

No End of Module Formal Examination

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

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Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Contact Hours	Every Week	3.00
Independent Learning	Every Week	6.00
	Total Hours	9.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_BBSMC_B	Bachelor of Arts (Honours) in Sport Management and Coaching	6	Elective
CW_BBSMC_B	Bachelor of Arts (Honours) in Sport Management and Coaching	8	Elective
CW_BBSOC_D	Bachelor of Arts in Sport Coaching and Business Management (Football)	6	Elective
CW_BBGAA_D	Bachelor of Arts in Sport Coaching and Business Management (GAA)	6	Elective
CW_BBRUG_D	Bachelor of Arts in Sport Coaching and Business Management (Rugby)	6	Elective
CW_BBSBC_D	Bachelor of Arts in Sport, Business and Coaching	6	Elective
CW_BBSBC_B	Bachelor or Arts (Honours) in Sport, Business and Coaching	6	Elective
CW_BBSBC_B	Bachelor or Arts (Honours) in Sport, Business and Coaching	8	Elective