ZBIO C3101: Sport and Exercise Biomechanics 2

Module Title:	Sport and Exercise Biomechanics 2
Language of Instruction:	English

Credits:	5

NFQ Level:	8

Module Delivered In	2 programme(s)

Teaching & Learning Strategies:	This module will be delivered in two one-hour lectures and one two-hour laboratory class per week. Any course-related issues or questions that may arise will be discussed in lectures. Course lecture summaries, course calendar, announcements and other course-related material will be available on Blackboard, a virtual learning environment. Students can contact the lecturer outside of class hours to discuss formative feedback given on written reports and group project work.

Module Aim:	To develop the students' knowledge and understanding of biomechanical concepts so that they can be applied to sport and exercise. To provide the student with the skills required to conduct a qualitative analysis. To enable students to become familiar with equipment and protocols in quantitative and qualitative analysis.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Develop the student's knowledge of the application of biomechanical concepts in relation to sport and exercise.
LO2	Collect, analyse and interpret biomechanical data of a sporting or functional movement and present a report.
LO3	Explain the processes involved in undertaking a qualitative analysis in sport and exercise.

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.*
Successful completion of year 2 or equivalent

ZBIO C3101: Sport and Exercise Biomechanics 2

Module Content & Assessment

Indicative Content
Theory The theoretical component will explore levers; qualitative analysis of selected human movements; fluid mechanics; muscle-tendon complex and the biomechanical assessment of various human movements.
Practical Develop the student's ability to undertake qualitative analysis in sport and exercise. Expose the student to a variety of biomechanical devices in order to learn how to analyze human movement in sport and exercise.

Assessment Breakdown	%
Continuous Assessment	20.00%
Practical	40.00%
End of Module Formal Examination	40.00%

Continuous Assessment

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Examination	A written examination held during lecture time on topics covered in the lectures and practical classes.	1	20.00	Week 9

No Project

Practical

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Practical/Skills Evaluation	Conduct a qualitative analysis of a skill and present the analysis using a powerpoint presentation and respective software to the lecturer.	2,3	40.00	Week 5

End of Module Formal Examination

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Formal Exam	A 2 hour written examination.	1,3	40.00	End-of-Semester

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

ZBIO C3101: Sport and Exercise Biomechanics 2

Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Lecture	12 Weeks per Stage	2.00
Practicals	12 Weeks per Stage	2.00
Estimated Learner Hours	15 Weeks per Stage	5.13
	Total Hours	125.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_SASPS_B	Bachelor of Science (Honours) in Sport and Exercise Science	5	Mandatory
CW_SASAC_B	Bachelor of Science (Honours) in Strength and Conditioning	5	Mandatory