

# Erindale College

<b>Assessment Period:</b>	2021 S2
<b>Course:</b>	EXERCISE SCIENCE
<b>Unit:</b>	The Body In Motion (1.0)
<b>Accreditation:</b>	T
<b>Year:</b>	12

## Unit Goals

- understand and examine biomechanical and physiological terminology and theories which relate to movement
- investigate the use of technology and techniques used to analyse and explore physiological demands of sports performance

## Content Description

### Concepts, theories and models

- critically analyse concepts, theories and models related to the body in motion, for example; biomechanical terminology, newton's laws of motion, sliding filament theory
- critically analyse the limitations and assumptions of the body in motion, for example; physiological responses and biomechanical influences
- critically analyses data, procedures and evaluates their validity and reliability, for example; physiological responses, mass/ weight, speed/velocity, distance/displacement, acceleration, momentum
- apply concepts, theories and models in a range of activities related to the body in motion, for example; biomechanical and physiological laboratories

### Principles, strategies, methodology

- critically analyses principles that influence the body in motion, for example; biomechanical principles and physiological responses to exercise
- critically analyses strategies used to examine the body in motion, for example; testing strategies and movement analysis
- comprehensive understanding of the strategic methodologies of the body in motion

### Nature and purpose

- critically evaluate the nature and purpose of the body in motion, for example; acute and chronic physiological responses
- understand the physiological response of the body in motion
- understand and evaluate the mechanics of the body in motion

### Representations and interpretations

- critically analyse issues, problems and practices associated with the body in motion, for example; technique analysis, muscle contraction physiology (sft), fatigue and recovery
- critically analyse protocols, procedures, future trends and their implications for the body in motion
- critically evaluate whether sources of information are valid and reliable
- comprehensively understand the implications on the body in motion for example; physiological responses
- comprehensively understand the significance and sequence of the body in motion, for example; sliding

filament theory, and laws of motion

- interpret data and predict physiological outcomes of the body in motion for example; biomechanical and physiological laboratories

## Communication

- evaluate and apply varying communication skills and methodologies within the context of the body in motion
- understand numerical comparisons of size and measurements, grouping, estimating, counting, space, statistical information, interpreting, and using graphs, tables and diagrams
- communicates using effective language, correct terminologies, language convention, forms and acknowledging sources appropriately

## Assessment Tasks

Name	Due Date	Weighting
Body in Motion Exam	12 November - 17 November	30%
Body in Motion (a) Stimulus Response	3 September - 7 September	30%
Body in Motion Case Study	25 October	40%

## Specific Unit Information

All students are expected to buy the Body in Motion Booklet

## School Assessment Information

### For penalties for late and non-submission of work

See [BSSS Policy and Procedure Manual 4.3.10](#) for further information.

### For academic integrity

See [BSSS Policy and Procedure Manual 4.3.12](#) for further information.

### For appeals processes

See [BSSS Policy and Procedure Manual 7.2](#) for further information.

### For moderation procedures (internal and external)

See [BSSS Policy and Procedure Manual 5](#) for further information.

### For meshing procedures

See [BSSS Policy and Procedure Manual 5.4.1](#) for further information.

### For method of unit score calculation

See [BSSS Policy and Procedure Manual 4.3.6.2](#) for further information.

### For procedures for calculating course scores

See [BSSS Policy and Procedure Manual 4.3.13.2](#) for further information.

## Achievement Standards for EXERCISE SCIENCE T - Year 12

	<i>A student who achieves an A grade typically</i>	<i>A student who achieves a B grade typically</i>	<i>A student who achieves a C grade typically</i>	<i>A student who achieves a D grade typically</i>	<i>A student who achieves an E grade typically</i>
<b>Knowledge and understanding</b>	<ul style="list-style-type: none"> <li>● critically analyses health, outdoor, physical education theories, concepts and models and evaluates their limitations and assumptions</li> <li>● critically analyses health, outdoor, physical education principles, strategies, methodology, approaches to data, procedures and evaluates their validity and reliability</li> <li>● critically analyses the nature and purpose of health, outdoor, physical education and evaluates the impact of strategies and techniques on individuals' performance, health and well-being in varied and changing contexts</li> <li>● critically analyses representations and interpretations of health, outdoor, physical education topics and evaluates their significance</li> <li>● communicates ideas with coherent arguments using appropriate evidence, language and accurate referencing</li> </ul>	<ul style="list-style-type: none"> <li>● analyses health, outdoor, physical education theories, concepts and models and explains their limitations and assumptions</li> <li>● analyses health, outdoor, physical education principles, strategies, methodology, approaches to data, procedures and explains their validity and reliability</li> <li>● analyses the nature and purpose of health, outdoor, physical education and explains the impact of factors on individuals' performance, health and well-being in changing contexts</li> <li>● analyses representations and interpretations of health, outdoor, physical education topics and explains their significance</li> <li>● communicates ideas and arguments using appropriate evidence, language and accurate referencing</li> </ul>	<ul style="list-style-type: none"> <li>● explains health, outdoor, physical education theories, concepts and models and describes their limitations and assumptions</li> <li>● explains health, outdoor, physical education principles, strategies, methodology, approaches to data, procedures and describes their validity and reliability</li> <li>● explains the nature and purpose of health, outdoor, physical education theories and describes the impact of factors on individuals' performance, health and well-being in familiar contexts</li> <li>● explains representations and interpretations of health, outdoor, physical education topics and describes their significance</li> <li>● communicates ideas and arguments with referencing</li> </ul>	<ul style="list-style-type: none"> <li>● describes health, outdoor, physical education theories, concepts and models with some reference to their limitations and assumptions</li> <li>● describes health, outdoor, physical education principles, strategies, methodology, approaches to data, procedures with some reference to their validity and reliability</li> <li>● describes the nature and purpose of health, outdoor, physical education theories and identifies the impact of factors on individuals' performance, health and well-being in familiar contexts</li> <li>● describes representations and interpretations of health, outdoor, physical education topics and makes some reference to their significance</li> <li>● communicates ideas and information with minimal referencing</li> </ul>	<ul style="list-style-type: none"> <li>● identifies health, outdoor, physical education theories, concepts and models with little or no reference to their limitations and assumptions</li> <li>● identifies health, outdoor, physical education principles, strategies, methodology, approaches to data, procedures with little or no reference to their validity and reliability</li> <li>● identifies the nature and purpose of health, outdoor, physical education theories with little or no reference to the impact of factors on individuals' performance, health and well-being</li> <li>● identifies representations and interpretations of health, outdoor, physical education topics and makes little or no reference to their significance</li> <li>● communicates limited ideas and information with limited or no referencing</li> </ul>
<b>Skills</b>	<ul style="list-style-type: none"> <li>● applies concepts, models, principles, methodology, ideas with control and precision to a practical context and specific physical, health or outdoor education activities</li> <li>● plans and undertakes independent inquiries and analyses relevant data and information based on critical evaluation of valid and reliable sources</li> <li>● makes discerning and effective choice of principles, strategies, methodology, procedures to solve a wide range of complex problems and to enhance meaning and the physical performances of self and others</li> <li>● evaluates with insight on practical techniques and performance with reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>● applies concepts, models, principles, methodology, ideas with control to a practical context and specific physical, health or outdoor education activities</li> <li>● plans and undertakes independent inquiries and explains relevant data and information based on an assessment of valid and reliable sources</li> <li>● makes effective and justified choice of principles, strategies, methodology, procedures to solve a range of problems and to enhance meaning and the physical performances of self and others</li> <li>● analyses with insight on practical techniques and performance with reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>● applies concepts, models, principles, methodology, ideas with some control to a practical context and specific physical, health or outdoor education activities</li> <li>● undertakes guided inquiries and describes data and information based on a appropriate sources</li> <li>● makes effective choice of strategies, methodology, procedures to solve problems and to enhance physical performances of self and others</li> <li>● explains practical techniques and performance with reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>● applies concepts, models, principles, methodology, ideas with minimal control to a practical context and specific physical, health or outdoor education activities</li> <li>● undertakes guided inquiries with some reference to data using limited sources</li> <li>● makes some effective choice of strategies, methodology, procedures to solve problems with some impact on physical performances of self and others</li> <li>● describes practical techniques and performance with some reference to specific skills criteria</li> </ul>	<ul style="list-style-type: none"> <li>● applies concepts, models, principles, methodology, ideas with little or no control in a practical context</li> <li>● undertakes guided research with little or no reference to data and sources</li> <li>● selects strategies, methodology, procedures to solve problems with little or no impact on physical performances of self and others</li> <li>● identifies practical techniques and performance with little or no reference to specific skills criteria</li> </ul>