

**Course Code:** PSE 4U1  
**Course Name:** Exercise Science  
**Grade:** 12



**COURSE OVERVIEW:**

This course focuses on the study of human movement and of systems, factors, and principles involved in human movement. Students will learn about the effects of physical activity on health and performance, the evolution of physical activity and sports, and the factors that influence an individual's participation in physical activity. The course is designed to foster the intellectual attributes that affect personal life performance. Enthusiasm for an active and healthy lifestyle, an enjoyment of physical activity and effective life practices are desired outcomes of this course. It is designed to pique intellectual curiosity and apply analytical and critical thought to concepts of living and moving.

This course is intended for those who plan a post-secondary study of Physical and Health Education (i.e. Physiotherapy, Chiropractor, Personal Trainer, Health Club Director, Nutritionist, Nursing, Sports Medicine, and Athletic Training).

Although the course is academic in nature, there are important physical tasks which will be included in the course of study. While athletic skill is not included in the course evaluation, participation in each activity will be an essential part of the final evaluation.

**COURSE OF STUDY:**

<b>I.</b>	<b>Unit 1 - Introduction to Anatomy and Physiology</b>	<ul style="list-style-type: none"> <li>• Skeletal and muscular system</li> <li>• Joint Mechanics and Joints Injuries</li> <li>• Muscle Fibers</li> <li>• Nervous, Cardiovascular and Respiratory Systems.</li> </ul>
<b>II.</b>	<b>Unit 2 - Human Performance and Biomechanics</b>	<ul style="list-style-type: none"> <li>• Nutrition for performance</li> <li>• Performance enhancing substances</li> <li>• Training principles and methods</li> <li>• Biomechanical issues and personal fitness training</li> </ul>
<b>III.</b>	<b>Unit 3 - Motor Learning and Skills Development</b>	<ul style="list-style-type: none"> <li>• Growth and development</li> <li>• Motor learning</li> <li>• Principles of coaching</li> <li>• Psychology of sport</li> </ul>
<b>IV.</b>	<b>Unit 4 - The evolution of physical activity and sport</b>	<ul style="list-style-type: none"> <li>• History of Physical Education and sport</li> <li>• Women in Sport</li> </ul>
<b>V.</b>	<b>Unit 5 – Social issues in physical activity and sport</b>	<ul style="list-style-type: none"> <li>• Business of Sport Entertainment</li> <li>• School and community sport programs</li> <li>• Social and ethical problems in sport</li> </ul>

## EXPECTATIONS:

- Describe the structure and function of the body and of physiological principles relating to human performance.
- Demonstrate an understanding of biomechanical principles related to improving movement.
- Demonstrate an understanding of the ways in which nutrition and training principles affect human performance.
- Demonstrate and understanding of individual differences in performance, growth and development.
- Demonstrate an understanding of the principles of motor learning.
- Describe the evolution of physical activity and sports
- Analyse the relationship of society and culture to sports and physical activity.

## EVALUATION ISSUES:

- **LATE ASSIGNMENTS:** Assignments submitted after the primary due date established by the teacher will be accepted with a penalty of 10% after the three day grace period. This three day penalty zone is the maximum time allowed for submissions. Once a closure date is reached and all assignments are marked and returned, no late assignments will be accepted and a **mark of ZERO** will be recorded.
- **INCOMPLETE ASSSIGNMENTS:** Assignments will be graded according to the extent with which they meet the criteria established in the rubric or evaluation structure.
- **MISSED TESTS:** Tests missed with a legitimate reason will be written within a few days of the student returning from the absence. Student eligibility to write the test and the date of writing will be at the discretion of the teacher in consultation with the department head. Students must bring in a note on the date of return confirming the parent or guardian is aware that a test was missed.
- **PLAGIARISM:** In any form reflects academic dishonesty and will result in a mark of zero for the assignment in

## ASSESSMENT AND EVALUATION:

Your achievement in the course will be evaluated throughout the semester and recorded under the following categories and weightings to comprise **70% of your final grade.**

Category	Description	Assessment	Weighting
<b>Knowledge / Understanding</b>	<ul style="list-style-type: none"><li>• Understanding of concepts, facts, definitions</li></ul>	<ul style="list-style-type: none"><li>• Quizzes (10%)</li><li>• Tests (30%)</li></ul>	40 %
<b>Thinking / Inquiry</b>	<ul style="list-style-type: none"><li>• Reasoning</li><li>• Applying the steps of an inquiry / problem solving process</li></ul>	<ul style="list-style-type: none"><li>• Major Project (20%)</li><li>• Written assignment (10%)</li></ul>	30 %
<b>Communication</b>	<ul style="list-style-type: none"><li>• Communicating and reasoning in writing.</li></ul>	<ul style="list-style-type: none"><li>• Seminar (10%)</li><li>• Written assignment (5%)</li><li>•</li></ul>	15 %
<b>Application</b>	<ul style="list-style-type: none"><li>• Applying concepts and procedures relating to familiar settings</li><li>• Selecting strategies</li></ul>	<ul style="list-style-type: none"><li>• In class assignment</li><li>• labs</li></ul>	15 %

A final evaluation will compromise **30% of your final grade.** The final evaluation will take place towards the end of the semester and will include an in class **culminating activity worth 10%** and a **written exam of 20%.**

In addition, as stated in the course outline, there is a **\$25.00** lab book fee, to be paid in cash during the first week of class.