HOLY TRINITY High School Course Profile

Course: PSE4U

EXERCISE SCIENCE: An Introduction to Health and Physical Education

Diploma Area: Health and Physical Education

Guideline: The Ontario Curriculum Grades 12 Health and Physical Education, 2000 Ministry of Education and Training

Grade Level/

Course Type: 12 University

Credit Hours: 110 hours

Prerequisite: NONE

Description: 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.

Textbooks: Exercise Science:An Introduction to Health and Physical Education-Temertzoglou &

Challen

Supplemental: Exercise Physiology-Powers & Howley

Foundations of Exercise Science-Klavora

Workbook: Exercise Science: An introduction to Health and Physical Education (\$20.00)

Instructor: Mrs. McGuinness

Website: http://hmcguinness.pbworks.com/ (Also accessible from the Holy Trinity homepage)

Course Aims: -pique intellectual curiosity and to apply analytical and critical thought to concepts related to human

movement

-foster enthusiasm for an active and healthy lifestyle and to emphasize the importance of effective lifestyle

practices

-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

nerformance

-demonstrate an 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

-analyze the relationship of society and culture to sports and physical activity.

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Units of Study:

Unit 1 Anatomy and Physiology

Students learn the structure and function of the body, and the physiological principles relating to human performance. They demonstrate an understanding of the skeletal and muscular systems and joint mechanics related to movement. Challenging students to examine and evaluate specific muscle location, structure, and function encourages them to apply their knowledge of interdependent systems. Students are provided with an opportunity to understand muscle contraction and energy systems and to link this information to physical activity. Comprehension of exercise physiology is acquired through the study of the cardio-respiratory system and the production of energy. Students focus on acute and chronic effects of physical activity and on the effects of environmental conditions on the body.

Unit 2: Biomechanics and Human Performance

Students learn the biomechanical principles related to improving movement. They explain and describe the laws of physics, biomechanical principles and joint mechanics as they relate to movement. Examples include Newton's laws related to velocity and linear acceleration, stability, the relationship between force and movement, angular motion, types of joints and range of motion. Students use these laws to analyse human performance. Students describe the relationship between nutrition and activity and investigate the effects of performance-enhancing methods and substances on human performance. Students demonstrate an understanding of the effects of training principles, technology, and environmental conditions on human performance.

Unit 3: Motor Development

Students demonstrate an understanding of the stages of development from infancy to adulthood. They also demonstrate an understanding of the factors that affect physical growth and development. They investigate the physical and psychological factors that affect skill performance. Students demonstrate an understanding of motor learning such as the phases of motor development and the skill acquisition process, to analyse or teach a skill.

Unit 4: Physical Activity and Sport In Society

Students explore the relationship between physical activity, sport, and society. They explore the evolution of physical activity by studying the history of sport. They identify issues in society that are related to sports and physical activity. These may include violence, exploitation, cheating, equal access, and physical activity trends. Students analyse the factors that influence participation in physical activity and sports, including current trends, coaching, role models and personal perception of physical activity. Students identify Canadian athletes who have contributed to sports and physical activity and describe their contributions. The relationship of society and culture to sports and physical activity is taught through the study of various issues. These include sport management, physical activity and the importance of being an informed consumer. Students describe how societal and cultural factors, including gender representation and ethno-cultural preferences, influence programs. They describe the benefits of school and community programs, and identify career opportunities in fields related to physical activity and sports.

The sections of the textbook and workbook correspond with the curriculum for this course. Each Unit of the text is divided into sections, each of which looks at a key field within the larger Unit.

At the beginning of each section of the textbook is a list of key terms you will encounter in the section. A comprehensive glossary is provided at the back of the text.

Numerous interest boxes and photographs throughout emphasize and elaborate on aspects in the main text. At the end of each Unit, there is a special section on Careers and Websites that provides information on possible occupational choices that can arise from further study, and online resources that are available for those seeking more information.

Each unit will incorporate overall and specific expectations, measured to assess the levels of achievement of a student's application, knowledge and understanding, thinking and inquiry, and communication skills. The final evaluations in this course will account for 30%. Evaluations throughout this course will account for 70%.

Evaluation of Evaluation:

Formative Evaluation

Knowledge & Understanding (50%) Quizzes Tests Assignments Bell Ringer Mid Term (30% of this mark)	Application (15%) • group assignments • oral presentations • quizzes • tests • written assignments
Communication (15%) • written assignments • oral presentations • portfolio	Thinking & Inquiry (20%) group assignments oral presentations portfolio self discovery written assignments workbook

Summative Evaluation

Portfolio-10% Written Exam-20%

General Expecations: Since this course is preparing students for study at the university level, independent review, completion of all course requirements, regular attendance and student initiative are crucial to success.



POLICIES:

RESOURCES: Students are to bring all necessary materials (notebook, texts, pen/pencil) to every class in order to achieve

complete success.

ASSIGNMENTS: Assignments, projects, essays, reports, presentations, and homework etc. not submitted on the due date will receive

a mark reflective of the AER policy. <u>unless discussed with the teacher ahead of time!</u> In the case of an absence on a due date, a parent must call the school and speak with me personally to confirm he or she is fully aware of the work/test/presentation that is due on that particular day. A homework assignment (usually a one-night task) may be handed in when the student returns from his/her absence. A phone call to the teacher is not necessary for one-night homework tasks. However, students are responsible for obtaining and completing homework

assignments for the day following their return.

MISSED TESTS: Attendance on test days is mandatory. Any student deemed too ill to attend school on the day of a test, must have a

parent call the morning of the student's absence acknowledging that he/she is aware of the test that day. The student and teacher will make arrangements for test writing the day the student has returned to school after the

illness. This will be at the teachers convenience usually lunchtime.

PRESENTATIONS: If a student is absent for an assigned class presentation, a mark of zero will be given for that presentation unless a

parent calls me that day to confirm the student is too ill to present. If it is a group presentation, the other members will proceed with the presentation to the best of their ability. Alternate arrangements will be agreed upon (for the

absent student) with the teacher if the parent confirms the illness/reason for the student who is absent.

PLAGIARISM: A mark of zero will result for plagiarism or cheating. No further makeup work will be permitted. Parents will be

notified.

WORKLOAD Learning will be facilitated through the application of the theory through activities such as labs, videos and portfolio

assignments. Students will be expected to complete assigned readings, and or web work, HOMEWORK CAN BE

EXPECTED NIGHTLY, if homework has not been assigned then you should REVIEW your notes. Surprise

quizzes will occur regularly throughout the course to ensure that material is

reviewed outside of class.

LAB TIMES Sudents can expect a number of lab periods that will run OUTSIDE of the traditional classroom time frame (lunch,

after school). Students are expected to attend the labs for review, and or video linking of presentation from sources

outside of the school. Labs may also take place in the gymnasium, students are expected to attend and

PARTICIPATE in these labs.

TEACHER SIGNATURE
PARENT SIGNATURE
STUDENT STGNATURE

